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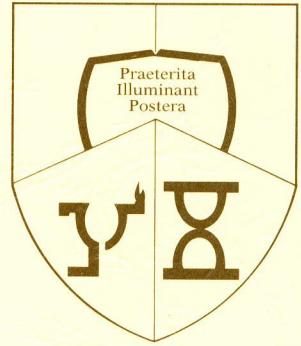
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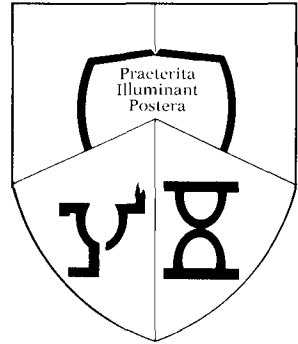


# The Accounting Historians Journal

June 1995  
Volume 22, Number 1

Research on the Evolution of Accounting Thought and  
Accounting Practice

Published by  
The Academy of Accounting Historians



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Accounting Practice

# The Accounting Historians Journal

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Volume 22, Number 1

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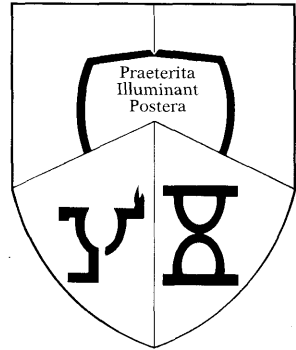
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## THE ACCOUNTING HISTORIANS JOURNAL

### Statement of Policy

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# **THE USE OF ACCOUNTING INFORMATION IN GOVERNMENTAL REGULATION AND PUBLIC ADMINISTRATION: THE IMPACT OF JOHN R. COMMONS AND EARLY INSTITUTIONAL ECONOMISTS**

*Abstract:* This paper examines the socio-political process by which an ensemble of such calculative practices and techniques as accounting came to be developed, adopted, and justified within turn-of-the-century public administration. We are particularly concerned with examining the influence of John R. Commons and other early institutional economists during this Progressive era. Using primary and secondary archival materials, our purpose is to make three main contributions to the literature. First, the paper explores Commons' contribution to the debates over "value" which seems to be somewhat unique in that he explicitly recognized that there exists no unproblematic, intrinsic measure of value, but rather that it must be socially constituted as "reasonable" with reference to common law. To illustrate this point, this paper explores Commons' role in the historical development and implementation of rate of return regulation for utilities. Second, the paper describes the contradictory role accounting played during this period in ostensibly fostering administrative objectivity while accommodating a more pragmatic rhetoric of "realpolitik" in its development and deployment. The third contribution is to establish a linkage between current work in economics and accounting concerned with utility regulation and the debates of ninety years ago, noting that

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An earlier version of this paper was presented at The Academy of Accounting Historians' Accounting Biography Conference, University of Mississippi, December 3 and 4, 1994. We wish to thank Janice Mereba, Barbara Merino, John Russell, and the anonymous reviewers for their useful suggestions.

Commons' contribution has not been fully explored or recognized within the accounting literature.

## INTRODUCTION

A myriad of such social innovations as workmen's compensation, social security, unemployment insurance, and utility and industrial regulation had their origins within the combined intellectual/political base of John R. Commons' institutional school of economics at the University of Wisconsin, and Governor Robert La Follette's Progressive party in the State of Wisconsin. Wisconsin's efforts, in turn, became the epicenter of socio-public administrative experimentation and served as a model for reform by other states and the federal government [Roosevelt, 1912, pp. v-ix; Kolko, 1963, pp. 212-216]. The stated purposes of this combined intellectual/political base were to modify the government's role in response to changing social as well as technical/industrial conditions, and simultaneously engender and benefit from the efficient administration of the American political economy.

Hays [1959, pp. 261-276] has suggested that the turn-of-the-century Progressive movement attracted institutional economists like John R. Commons who advocated the "rational" deployment of public resources, supported by a complex of such rationalizing techniques as accounting, to solve broad social problems. This movement served to legitimize a system of decision making based on calculated criteria thought to be objective, rational and above the give-and-take of political maneuvering. It made the political seem apolitical [Rose, 1977, pp. 68-71]; it took the debatable beyond the realm of open debate [Hopwood, 1984, pp. 170-176]; and it differentiated the political and immoral from the objective and merely factual [Zucker, 1977, pp. 733-738; Miller and O'Leary, 1990, pp. 492-498]. This movement sought to substitute and legitimize one system of decision-making — the one inherent in the spirit of modern science, technology and business — for another — the one inherent in stylized but subjective exchanges among overtly political social actors. Decision making and control became a more calculative, procedurally-oriented process, involving measurement and prediction, that invoked business techniques for directing the course of events toward predictable and stable outcomes [Kolko, 1963, pp. 1-10]. This shift moved decision making away from the local government to the larger networks of human interaction, and it achieved more than legitimate a new form of deci-

sion making; it also transferred power to the central executive office [Wilson, 1956, pp. 88-117]. As Hays [1959, pp. 261-276] suggested, an examination of the Progressive movement illuminates not so much the *content* of public policy, but the *nature* of the resulting political structure and the *types* of interactions peculiar to it.

The primary purpose of our paper is to trace the intellectual underpinnings of John R. Commons' institutional economics in order to appreciate the impact of Commons' work on the use of accounting information in turn-of-the-century governmental regulation and public administration.<sup>1</sup> It is proposed that John Commons joined such other pragmatists of the era as John Dewey [1910, 1922] and Thorstein Veblen [1904, 1919] to critique the inequities created by the concentration of wealth during the late nineteenth century, as embodied in such monopolies as railroads and utilities. However, departing both from pragmatists who contended that the "pecuniary calculus of accounting" was dysfunctional to the interests of society [e.g., Merino, 1993, p. 164] and from propriety theorists of the era who disclaimed responsibility for the concept of "value", Commons [e.g., 1907a, pp. 1-18; 1910, pp. 215-217] sought to abstract accounting practice from the private sector, transform it by developing the concept of "reasonable value" and the corresponding "rate of return," and then apply them to the regulate private sector monopolies which he saw as harmful but necessary.

The remainder of this paper is organized into three sections. Within the first section, Commons' work is briefly contextualized with reference to neo-classical economics, and other pragmatists and accounting theorists of the Progressive era. This contextualization of Commons' work also details Commons' approach to institutional economics and its relationship to the Social Gospel Movement. In section two, we describe and problematize Commons' concepts of physical valuation and rate

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<sup>1</sup> Although a comprehensive analysis is beyond the scope of this paper, Commons' writings span a range of matters which may be broadly classified as dealing with the question of *governance*. In *Proportional Representation and Representative Democracy* [1900] he dealt with the question of political order (i.e., representation in government); in *A Sociological Theory of Sovereignty* [1965], *Social Reform and the Church* [1894], and *Races and Immigrants in America* [1920], he dealt with the question of social order (i.e., institutional modifications to the corrosive aspects of self-interests, etc.); in *The Distribution of Wealth* [1893], *Legal Foundations of Capitalism* [1924], *Institutional Economics* [1934], and *Industrial Goodwill* [1919], he dealt with the question of industrial/economic order (i.e., transactions, private property, regulations).

of return as applied to the regulation of utilities; this section concludes with a theoretical interpretation of Commons' regulatory efforts in terms of the "orthodox administration" and "realpolitik" forms of political rhetoric. Finally, section three offers concluding comments.

## INSTITUTIONAL ECONOMICS AND ACCOUNTING THEORY

The institutional approach to addressing economic problems was concerned with overcoming the limitations of the neo-classical model and its inability to provide insight as to the crucial social and organizational problems of the time. In particular, institutional economics stressed the dynamic socio-political, institutional factors influencing economic life in the belief that the neo-classical model was almost totally inappropriate to the analysis of social change and the role of institutions in society [Jepperson, 1992, pp. 150-156].<sup>2</sup> In response to the limitations of neo-classical economics, institutional economists sought to understand the mechanisms by which social and economic actions were carried out, but saw political, social and economic behavior as something more than merely the aggregate consequences of individual activities. The institutional school of economics was united by a common conviction that institutional arrangements and social processes matter. It is the analysis of change, particularly analysis of the changing social and organizational forces at the turn-of-the-century, which motivated the institutional approach to the study of economic problems.

On this theme, and specifically related to accounting, Merino [1993, pp. 163-165] credited institutional economists, and such related Progressive era pragmatists as Dewey [e.g., 1910, 1922] and Veblen [e.g., 1904, 1919], for recognizing that the

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<sup>2</sup>Basically, in neo-classical economics, price equals exchange value, which results from the interaction between demand and supply. Monopolies are inherently anti-competitive and charge monopoly prices, thus subverting the public good: private vices do not lead to public benefits. In contrast, for Commons, price equals "reasonable value" which results from the interaction between demand and supply as augmented by negotiations. Thus, to correct monopolistic ills, negotiation between monopolies and regulators and/or its judicial system is necessary in order to produce a "reasonable value" [Commons in Dorfman, 1964, pp. 18-35]. Moreover, this distinction is parallel to DR Scott's [1931, pp. 34-61] notion of market control versus accounting control, since the latter is the basis for the courts' decisions.

"pecuniary calculus of accounting" provided economic generalizations which served as systems of rationalization for the ongoing system of economic power embedded in the oligopolistic markets of the time. This recognition stands in stark contrast to that of traditional accounting theorists who, as Merino [1993, pp. 163-165] argued, faced a formidable task: they had to reconcile traditional accounting profit measurement, based on individualistic economic theories, with an emerging corporate economy. Traditional accounting discourse as to profit measurement revealed an unquestioning acceptance of neo-classical economic theory and implicitly supported the premise that competition would ensure survival of the fittest, as faithfully represented by accounting profit. Accounting sought scientific status by claiming to be an objective reporter of economic reality, depicting exchange prices, the basic data of accounting, as factual. Institutional economists, in turn, proposed that such notions as accounting profit were flawed by the implicit embedding of organized interests, and that neo-classical economics had taken for granted the very phenomena that needed to be systematically examined: the role of institutional structure, such as economic or accounting information, in preserving the status quo in power relations, or in the creation and legitimization of alternative social and organization ideologies and processes.

Merino [1993, pp. 175-176] made the provocative point that the key issue is not institutional economists' critique of neo-classical economics, per se, but whether the traditional accounting theorists' neo-classical framework merely represented a failure to recognize the inconsistency between uncritical acceptance of laissez-faire economics and their claim to objectivity, or whether the acceptance of this framework stood for something more insidious — the possibility that neo-classical economists and related accounting theorists consciously devised a discourse that supported the position of stockholders/owners and strengthened the authority of those who controlled financial resources (for example, monopolies), and consciously relied on an assumption they knew was false in order to justify traditional profit measurement.

This question which Merino [1993, pp. 175-176] posed as to neo-classical economics and traditional accounting theory also needs to be asked of institutional economics to fully appreciate its influence as well as the specific work of John Commons. On this point, Hoksbergen [1994, pp. 705-708] reasoned that institutional economics suffers from a failure to recognize its own

internal inconsistencies. As stated earlier, institutional economists were united by their common conviction that institutional arrangements and social processes matter, and their related critique of neo-classical economics' adherence to universal objectivity, facts and certainty. Hoksbergen [1994, p. 707], however, argued that despite their criticism of neo-classical economics for staking claim to universal objectivity, there has been a tendency for institutional economists "to see itself as a rival and potentially a superseding competitor to neoclassical economics . . . trying to call on some meta-theoretical extrinsic criterion to prove to itself and others that its economics is superior to others. . . ." This point of view is indeed evident in Richard T. Ely's [1931, p.9] (early University of Wisconsin institutional economist, and colleague and mentor of Commons) reflection on his work:

I have always recognized that we do not have "natural law" in the economic world, but rather "social law" . . . Nevertheless, I felt that I had discovered an economic law which closely resembled the laws of nature in the regularity with which it operated. I thought that we could predict how some of these economic laws would operate with almost the certainty with which we could predict the operation of the laws of the physical universe.

Thus, as Hoksbergen [1994, pp. 705-708] suggested and consistent with Merino's [1993, pp. 175-176] position, institutional economics may also suffer from problems in its failure to recognize the inherent contradictions in the development of its intellectual base. Similarly, Kolko [1963, pp. 212-216] was quite critical of institutional economists on this point, arguing that Veblen was the only institutional economist who recognized this contradiction and that institutional economics itself served the conservative political capitalism of the Progressive era. Therefore, institutional economics is more than just a voice of dissent against neo-classical economics and related traditional accounting theory. It is instead an important intellectual base which itself needs clarification in an effort to understand its impact on the development of accounting theory and practice.

### *John R. Commons' Approach to Institutional Economics*

John R. Commons' theory of institutional economics attempted to define social behavior in terms of how we create

institutional structures and techniques to resolve conflicts of interest, as well as establish regulations concerning governmental-industrial relations [Harter, 1962, p. 212]. A common thread between the work of Commons and other pragmatists of the era such as Dewey and Veblen was that their respective works can be characterized as voices of dissent. Both Commons and Veblen were concerned with the rapid economic changes they and their generation witnessed, and both believed that the tasks of economics included the explanation for, the development of monopolies, and how they might be directed toward serving society. While Commons evolution stressed institutional adaptation to changing conditions, Veblen emphasized the reverse — that institutions actually inhibit adaptation to change. Commons evolutionary view provided him with incentives to be an active reformer within government, while Veblen largely remained an external critic [Horwitz, 1992, pp. 145-167].

The reformist approach can be found in Commons' earlier, predominantly industrial relations work. Because he believed monopoly was inevitable, Commons did not intend to have society suppress it; rather, he intended to protect members of the community from its abuses through regulation. Commons' strategy for social reform consisted of formulating adaptations of economic institutions within capitalistic systems in such a way that the business community would have economic incentives to improve the conditions of the working class. For example, in his book *History of Labor* [1921, pp. 40-64], and as influenced by his contacts with such labor leaders as Samuel Gompers who opposed radical change, Commons generally portrayed unions as organizations which are compatible with the capitalistic system, while unions having revolutionary posture were pictured as deviations from the norm.

One of the critical aspects of both Commons' and Veblen's work pertained to the evolutionary theory of value founded on the habits and customs of social life. Although Veblen had not used court decisions in his work, Commons found them a rich source. Commons maintained that in the development of common law, many customs are tested for survival. In an economic evolution, new forms of behavior develop in response to new needs and opportunities. Many of these new forms give rise to conflicts which must be settled by the courts. Those that are "reasonable" or "good" in the eyes of the law are accepted, while those that are "unreasonable" or "bad" are suppressed. Thus, case by case, common law produces standards for social and

economic behavior [Horwitz, 1992, pp. 145-167]. Hence, Commons' study of the development of the country's economic system was to a considerable extent a history of common law, and involves examination of the social construction of norms, laws and regulatory mechanisms, as opposed to the identification of universal intrinsics [Horwitz, 1992, pp. 145-167; Hoksbergen, 1994, pp. 705-708].

Much of Commons' interest in the legal aspects of economics goes back to his teacher at Johns Hopkins University, Richard Ely, and German scholars. His focus was placed on the entire social environment of an economy. One fellow classmate of Commons in the late 1870s, Woodrow Wilson, initially considered Ely "somewhat too radical" in terms of his progressive ideas, ideas which Wilson later espoused in the beginning of his political career at the turn-of-the-century [Wilson, 1956, pp. 88-117]. Not only did Ely send Commons on extensive projects as a caseworker for charitable organizations, but he also convinced him to study problems from an historical perspective using "facts".<sup>3</sup>

Specifically, Ely's views on monopolies are critical and prove particularly influential when Ely moved to and later hired Commons as a faculty member at the University of Wisconsin. As Ely [1931, pp. 3 & 6] stated:

I propose now to state my views, not only in regard to municipal ownership of public utilities, but the ownership of other industries like railways which are, by reason of their inherent qualities, monopolies. For industries of this sort, I used at first the term "natural monopolies". . . . Now, what were we to do with natural monopolies? Public regulation of private monopolies did not look to me at that time very promising. On the other hand, it [regulation] appeared to me to be a source of great evil because there was always danger that those who were to be controlled would, themselves gain control of the agency of control. . . . It seemed to me that if we sharply defined the field of our industries into those that were competitive and those that were monopolies; and left to private ownership and initiative the competitive industries and had public ownership

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<sup>3</sup>Ely had studied economics in Germany under the German Historical School, emphasizing that historical, statistical and other studies accumulating facts should be given more attention. Commons adopted both Ely's inductive approach as well as Ely's humanitarian attitudes.



and operations of the natural monopolies, we would have an ideal situation. That would establish, I thought, a harmony of interests.

Two important aspects of Ely's view and their relationship to Commons' work are worth noting. First, is the acceptance of monopolies as "natural", which, in turn, argues for their control, not dissolution — a view which permeates Commons' later regulatory efforts. Second, Ely advocates public control and public ownership of these natural monopolies — a view which might be considered more liberal than Commons' eventual view which advocated public control and *private* ownership.<sup>4</sup> However, Ely's efforts to import Germany's approach into the U.S. gave way to the reality of American culture, much in the manner advocated by Commons. As Ely [1931, pp. 15, 16, 20] stated:

Now when it comes to public ownership of natural monopolies things have not turned out as I anticipated they would. . . . Government becomes more and more significant on its economic side, but there is not a corresponding general interest in public administration, and a correspondingly increase in comprehension of its significance. The great mass of the people are interested in games, base-ball especially and foot-ball. . . . It is obvious that the American people are determined, first of all, to try out the commission control of private industry, rather than public ownership.

Ely's views were also influenced by socialist efforts in England at the time. Extensive, twenty-seven years of correspondence between Sidney Webb reflect this influence. Much of Ely's correspondence with Webb revolved around Ely's book *Political*

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<sup>4</sup>Clearly Ely's [1931, p. 15] views were very much influenced by his German background as he stated:

I thought that human nature, such as it is found in our country and in modern civilization, would respond to public ownership of natural monopolies with all its implications. I thought that we would remove the source of corruption, and certainly at the time I was writing, these sources of corruption were very largely connected with private ownership of natural monopolies. I thought that if we could have public ownership and operation of natural monopolies, we would have pure government; we would have excellent operation of these natural monopolies through a highly trained and capable civil service in the nation, state, and city . . . I had it in mind that we would approximate the excellence of the civil service in Germany where . . . they enjoy security of tenure and where special excellence is honored by generous recognition of those in control of government.

*Economy* [1889]. Webb gave Ely much feedback on the chapter on Socialism, and Webb was also instrumental in finding a publisher in England [*Correspondence archived at the Wisconsin Historical Society*, 12/21/1888; 2/1/1889; 3/3/1889; 3/19/1889; 3/31/1891; 1/22/1892; 9/19/1892; 2/21/1894]. As Webb [12/21/88] wrote to Ely on a planned trip to Baltimore with Edward Pease of the socialist Fabian Society:

[The Fabian Society] would be glad to permit some conversation with you, especially as to the progress and prospect of the Socialist idea in America, and as we are both in the center of the English Socialist movement we could perhaps give you some details of interest.

This relationship between Webb and Ely, revolving around a sharing of socialist ideas, and later with a more conservative Commons, contributed to the basis of the "Wisconsin Idea" which advocated the expansion of the State's functions to safeguard the well-being of its citizens and the conscription of experts to identify the needs of the people, and then devise and administer reform policies to serve these needs.<sup>5</sup>

### *The Social Gospel and Progressivism*

Early expressions of Progressive thought were based upon and yet extended beyond conceptualizations of morality within organized religions. Like many Progressives, John Commons and Richard Ely were part of the Social Gospel movement which rejected the orthodox Christian position that man is innately sinful. It maintained that human nature is essentially good, but is undermined by a corrupt society. The social gospelers generally sought to restore, if not reverse what they thought were the unnecessary consequences of industrialization, urbanization and the expansion of technology. Their avowed goal was to "christianize business, industry, politics, and the city's immigrant populations, all of which [were] regarded as the major, unregenerated spheres of society" of which "business was declared to be the most significant unregenerate institution within

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<sup>5</sup>Concerning Progressivism's reliance on experts, we do not mean to imply that only to Progressives or the U.S in general relied on expertise. For example, slightly predating John R. Commons' work, Sidney and Beatrice Webb [1902a, 1902b], who entertained Commons during his National Civic Federation work [Commons, 1934, p. 114], were espousing a theory wherein experts drawing upon an impartial, scientifically derived knowledge-base, could assist labor in elevating its stature and financial well being.

the American social order" [Mills, 1943, pp. 168-173; Greek, 1992, pp. 56-58]. The gospelers believed that man [*sic*] "by using his intellect can remake society, that he can become the creator of a world organized for man's advantage" [Woodrow Wilson, in Waldo 1948, p. 16], and that conscious social action would eradicate sin and hasten the coming of God's kingdom, and, consequently, would promote social reforms to "purify American society" [Woodrow Wilson, in Waldo, 1948, p. 58].

It is with this emphasis of the social that the moral dimension of the Progressive interventionist strategy of changing the processes of government was founded [Hamilton and Sutton, 1989]. After having established the preeminence of social salvation, the next step in legitimating the interventionist strategy was to displace the importance of natural law, God or the ethical, responsible behavior of the individual, in favor of an experiential grounding in such social groups as organizations. In turn, social reforms comprising the interventionist strategies could express societal values and goals in a way amenable to their accomplishment by bureaucracies. But here, the operationalization or encoding of societal goals and values within the formal structure of organizations could be accomplished only by such experts as public administration scientists and sociologists "who took up the idea of organization as a banner" during this era [Hamilton and Sutton, 1989, p. 13]. In turn, the act of organization was seen by Progressives as an ethical act and hence organization became a goal in-of-itself [Hamilton and Sutton, 1989, p.15].

Indeed, the melding of the religious and the political by the Progressives led Hofstadter [1955, p. 320] to remark that "the key words of Progressivism were terms like patriotism, citizen, democracy, law, character, conscience, soul, morals, service, duty, shame, disgrace, sin, and selfishness." The resulting ethos, in turn, directed such Progressives as Commons to channel their energies towards the common goal of forming an ideal democracy populated by an informed and sovereign citizenry, and guided by conscious and redemptive human action, wherein business and politics were harnessed in the service of society and the individual [Kolko, 1963, pp. 34-61].

### *Summary*

Merino [1993, pp. 163-165] credits institutional economists for recognizing the limitations of neo-classical economics and related traditional accounting theory. She also asked the ques-

tion of whether traditional accountants were oblivious to the inherent contradiction in their claim to objectivity and uncritical acceptance of neo-classical economics, or whether this contradiction represented an effort to preserve the status quo in power relations among competing interests. Hoksbergen [1994, pp. 705-708], in turn, recognized that a major part of the development of institutional economics was accomplished by a faction that claimed superiority over neo-classical economics by searching for universal laws able to be gauged by external criteria or "facts". This faction is most apparent in the "Wisconsin School", the reformist Progressive party, and the Social Gospel movement — with which John Commons was also significantly involved. Hoksbergen [1994, pp. 705-708] also identified an inherent contradiction in the reformist effort of institutional economics and the intellectual underpinnings of institutional economists. This apparent inherent contradiction in the efforts and work of John Commons begs Merino's query as to the power and politics of the development of a significant knowledge base to be re-visited. As Kolko [1963, pp. 15, 214, 215, 3] argued:

Richard T. Ely, for example, maintained that large-scale business was inevitable, but that, save for certain types of services, monopolies in the pure sense were not pre-ordained; the burden of his writing was concerned with the desirability of government regulation of "artificial" monopolies that had sprung up rather than with regulation as a means for restoring purely competitive conditions . . . [t]he idealization of the state was also the result of the peculiar training of many of the American academics of this period. At the end of the 19th century the primary influence in American social and economic theory was exerted by German universities. The Bismarckian idealization of the state, with its centralized welfare functions designed to preserve capitalism and the status quo in its more fundamental aspects, was suitably revised by the thousands of key academics who studied in German universities in the 1880s and 1890s. . . . Conservative in their ends, as were big business advocates, the academics who proposed economic reforms failed to understand the process of political capitalism. Instead, the pressures and leverage created by their ideas helped make political capitalism possible. . . . It is business control over politics rather than political regulation of the economy that is the significant phenomenon of the Progressive era. Political capitalism

is the utilization of political outlets to attain conditions of stability, predictability, and security — to attain rationalization — in the economy.

A key question is whether Commons also fell prey to the positive quest for universal laws of economics reliant on “pure facts”, or whether his involvement with regulatory reform was more reflexive in nature.

### PHYSICAL VALUATION AND RATE OF RETURN REGULATION

Relying upon the landmark *Munn v. Illinois* [1877] case in which the U.S. Supreme Court upheld Illinois’ right to regulate the “exploitive” prices charged to customers by a private sector company, Governor Robert La Follette attempted to regulate two major Wisconsin industries — railroads and utilities.<sup>6</sup> Concerning the former, La Follette introduced an eventually successful Railroad Regulation Bill in 1905 that established the Railroad Commission. This commission based its efforts on the earlier work of Henry Carter Adams [for example, 1887, 1903, 1918], the first statistician of the U.S. Interstate Commerce Commission who devised an accounting system that detailed railroad revenue, expenses and earnings which served as a basis for much subsequent federal regulation [Churchman, 1976, pp.

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<sup>6</sup>Another lawsuit of this era having a less effect on Wisconsin’s regulatory efforts though it is relevant to contextualizing Commons’ work is *Smyth vs. Ames* [1898]. This case related to a de-physicalized notion of property wherein government regulations were adjudicated as to the “reasonableness” of railroad rates using “fair” value measures, increasingly market values. The focus of the court was to balance granting government enough power to regulate while guarding against implicit confiscation of property. *Smyth vs. Ames* specifically established a set of multiple factors for ascertaining reasonableness values, although these factors proved unwieldy in their application [Horwitz, 1992, p. 160]. Alternatively, Siegel [1987, pp. 243-247] interpreted this case as serving as the foundation for adopting “reproduction cost” (or market value) applied in the 1920’s, a concept Commons [1924, pp. 64-82] later criticized as circular in that assets associated with higher rates of return will have higher reproduction costs, or market value, which will in turn justify higher rates. Another related case following Wisconsin’s 1907 law was the Mann — Elkins Act of 1910 which empowered the Interstate Commerce Commission to effectively regulate railroads. In part, the act placed the burden of persuasion on carriers to establish the “reasonableness” of the amount sought for rates; however, the I.C.C. had difficulty in imposing this act on industries other than railroads [Smith, 1958, pp. 239-242, 363].

42-65]. Milo Maltbie [1901, pp. 39-51] eventually transformed this system into the pioneering uniform system of accounts, which served as a tool for the general social control of private enterprise [Trebing, 1984, pp. 232-239; Ulen, 1980, pp. 306-308]. In Wisconsin, La Follette's Railroad Commission sought to regulate rail pricing by devising an "accounting rate of return" mechanism for gauging what would be a "fair" return on invested capital for railroads.

In turn, this basic approach was specifically emulated and mobilized by Commons, who La Follette chose to draft what would become the Wisconsin Public Utility Law of 1907 [Commons, 1934, p. 126].<sup>7</sup> As eventually administered by the Railroad Commission, the Public Utility Law employed an "objective rate of return model" (which subsequently became known as the "cost plus pricing regime") for regulating rates charged to customers of Wisconsin's electric utilities. Because of Commons', La Follette's, and Wisconsin's visibility and success in the Progressive reform efforts, components of the 1907 Law vis-a-vis accounting rate of return regulation gained rapid acceptance in at least 29 states and the federal government by 1913, and indeed impacted utility regulation for most of the twentieth century [Trebing, 1984, pp. 232.239].

It is perhaps important to note that Commons and Adams saw such monopolies as utilities and railroads as "natural" in the sense that they embodied the economic "law" of increasing returns from economies to scale. In this view, monopolies could not be abolished because this would ultimately harm the public. Instead, they must be regulated. Thus, Commons and Adams saw as necessary a dismantling of the liberal ideal of a strict partitioning of civil society from the state in the sense that the state had to regulate the private sector. According to Adams [1887, p. 64], "For all industries which conform to the principle of increasing returns, the only question at issue is whether society shall support an irresponsible, extra-legal monopoly, or a

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<sup>7</sup> Commons had earlier been part of the National Civic Federation which had investigate the operations of public utilities in the United States with reference to prior efforts in England. Commons' part in the investigation centered on examining labor issues, but he had visited so many utility companies that he had acquired both the interest and knowledge in the public utility field. Commons came to think of his reform efforts as institutional adjustments that could make the economic system of utilities more workable [Commons, 1934, pp. 112-130].

monopoly established by law and managed in the interest of the public.”<sup>8</sup> In order to effectively regulate such natural monopolies, it was necessary to render the private public, i.e., visible to public sector regulators if not the public. It is in this capacity of rendering the private public that accounting was to be invoked.

### *The Regulation of Utilities*

The notion of “reasonable value” was the critical element in the *Wisconsin Public Utility Law of 1907*. Here, an accounting rate of return on a company’s assets (or rate base) is based upon the concept of “physical valuation” which Commons [1907b, pp. 221-222; 1910, pp. 215-217; 1913, pp. 291-292] saw as essential in drafting the Wisconsin law. The concept of physical valuation serves as the foundation for setting prices, which are intended by regulators to allow utilities to earn their cost of capital on the depreciated, original cost of their assets, as well as recover their operating costs [Mereba, 1994, pp. 52-65]. In Commons’ opinion, the best method would be to tie the rates to a “reasonable return” on the value of invested capital. As such, “the accounting system is the central endogenous variable available to regulators in the context of rate of regulation. [I]t is through accounting procedures that wealth is distributed [among] groups and electricity rates are set” [Jarrell, 1979, p. 105]. Accordingly, accounting could no longer disclaim responsibility for the concept of valuation by claiming to be merely representing “natural” facts relating to “natural” monopolies. Indeed, Commons’ definition of “fair rate of return” remains a basis for industry regulation and a focus for academic research in economics and accounting

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<sup>8</sup>As suggested earlier, this view and perpetuation of monopolies as “natural” economic entities has a legacy in the work of Commons’ mentor — Richard Ely. In turn, Ely was also a colleague of economist Henry C. Adams as the two of them were co-founders of the American Economic Association in their efforts to find an outlet to accommodate their intellectual perspective [Kolko, 1963, p. 15]. Furthermore, this view as to the natural status of monopolies predates the work of Ely, Commons and Henry C. Adams in the work of Charles Francis Adams, Jr. As Kolko [1963, p. 14] points out, at least a decade before the work of those institutional economists:

Charles Francis Adams, Jr., president of the Union Pacific railroad from 1884-1890 [and founder of the Massachusetts Railroad Commission which influenced the formation of the I.C.C.], was announcing that “the principle of consolidation . . . is a necessity — a natural law of growth. You may not like it; you will have to reconcile yourselves to it.” “The law is invariable. It knows no exceptions.”

[illustrative of recent works include, Sappington, 1980, pp. 363-370; Baron and Myerson, 1982, pp. 911-915; Abdel-khalik, 1988, pp. 44-62; Lanen and Larcker, 1992, pp. 208-228].

As previously noted, Harter [1962] suggested that in order to learn the meaning of the concept of "reasonable value" Commons turned to the study of common law, which institutional economists maintained was the means by which many societal habits and customs become encoded in a governance structure. Commons attributed his notion of reasonable value to state Senator A. W. Sanborn from whom Commons obtained the idea that legal valuations were oriented toward the future [Horwitz, 1992, pp. 145-167]. As Commons [1934, p. 123] stated, "From this starting point, I worked for many years in making futurity the main principle of [institutional] economics, distinguished from all other schools of economic thought." In an evolving economic-political system, new forms of social behavior emerge in response to new needs or opportunities, and these new forms give rise to conflicts which must be resolved by the courts. Those forms that are "reasonable" or good in the eyes of the court are accepted, while those that are "unreasonable" or bad are suppressed. As Commons [1924, p.vii] explained,

From the Court decisions it seemed that anything "reasonable" would be sustained, and so we had to use the words "reasonable value" . . . whether we knew what it meant or not.

Reasonable value, in turn, represents both an upper and lower limit of value as implicitly established by the American judiciary [Commons in Dorfman, 1964, pp. 18-25]. It is identifiable not as reflecting or seeking to reflect some notion of objective worth, but merely as "good" or "viable" in the eyes of competing parties in a court of law. Thus, case by case, common law produces standards for gauging economic behavior [Harter, 1962, p. 219]. According to Commons [1934, p. 156, 160; emphasis added]:

Reasonable values and reasonable practices were entirely new words introduced into the theories of political economy. Often my students, and sometimes my economist critics, said that "reasonable" was purely subjective, and that there were as many meanings of reasonableness as there were individuals. Such a term placed the determination of reasonableness in the arbitrary mind of whatever individual happened to be in



authority. But I considered this objection to be an inheritance from the subjective individualism of preceding economic theorists. A collectivist theory of value derived from existing best practices, from custom, the common law, and the decisions of courts, could make reasonableness "objective" and therefore capable of investigation and testimony, leading to the formation of working rules for collective action in control of individual action. . . . So I contended that, in economic conflicts, reasonable values and reasonable practices were not the subjective opinions of anybody, but were the collective opinion, expressed in action, of those whose economic interests were conflicting, but who investigated together, and knew by experience, all of the facts.

Thus for Commons, objectivity was defined by the degree of social-legal consensus concerning "reasonable value." Objectivity — social objectivity — and the process of developing a reasonable value were intertwined. In contrast, as argued by Merino [1993, pp. 178-180], traditional accounting theorists' notion of objectivity was markedly distanced from the notion of reasonable value in that they disclaimed any responsibility for value, and instead emphasized objective and documentable "natural" exchanges that largely involved transactions. Commons [1907b, p. 222] stated

A significant feature of the Wisconsin legislation is . . . its reliance on the physical valuation as the first step in regulation (physical valuation means nothing more or less than the cost of construction or reconstruction of the physical property). Accompanied by a complete system of uniform accounting with special precautions as to depreciation and construction accounts, every person in the State may know at the end of each fiscal year exactly the rate of profit which each company or municipality has made on the actual property invested. With the Wisconsin idea of physical valuation as the starting point, every citizen can determine for himself just as well as the Commission whether the rates and fares charged by the corporations are yielding an excessive profit.

In the *U.S. Senate Hearings on the Physical Valuation of Property of Common Carriers* [1913, pp. 90-91], whose purpose was to develop effective "natural" regulatory policy, Commons further defined his physical valuation approach as "an accounting proposition" which recognizes both the cost of the property

and a fair rate of return. Commons [*U.S. Senate Hearings on the Physical Valuation of Property of Common Carriers*, 1913, pp. 90-91] acknowledged that while

. . . corporations have devoted their property for the public use, and therefore during their history they were entitled to a fair rate of return . . . these valuations are very liberal, [but] they were all based consistently on the principle of cost rather than value, and therefore they represent the amount of sacrifice which investors have incurred for the service of the public.<sup>9</sup>

During related Senate Hearings, a Senator Cummins challenged Commons on the point that Commons' physical valuation approach actually permitted an excess of capitalization of railway property, thus allowing owners an excessive return on investment at the expense of customers. Following up on this theme, Senator Lippitt [*U.S. Senate Hearings on the Physical Valuation of Property of Common Carriers*, 1913, p. 108; emphasis added] criticized the physical valuation and rate-of-return approach by telling Commons that:

You are making the National Government in that case a private nurse to the investing public, and when they (corporations) have been wise and enterprising and efficient you are taking away their reward, but when they have been unwise and inefficient and negligent in business, you are making it up to them, *which may be good polity for the future, but it is not the case that prevailed in the past.*

Commons [1934, p. 125] later agreed, stating, "I am told by railway people that they feel confident that they will come out better than the public in this valuation problem."

Wisconsin legislator Edward Bennett [1931, p. 1] was also critical of the *Wisconsin Public Utility Law of 1907* and the discretionary nature of accounting within it because he felt that the bill "empowers the Commission to fix just and reasonable charges for services, [yet] leaves the citizen to search the law in vain for any statement of the policies and principles which are to be followed by the Commission in the determination of the reasonableness of the charges." Citing Section 196 of *Wisconsin*

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<sup>9</sup>This view is consistent with Ely's [1931, pp. 3-12] emphasis on the excellence of the civil service in Germany where the government provides generous recognition of those who contribute to social and economic functioning.

*Public Utility Law of 1907* as the one area where “the substance of everything which the law has to say about the principles of rate-making and valuation,” Bennett [1931, p. 1] gave examples of the law:

Paragraph 196.03. *Utility charges to be reasonable and just.* Every public utility is required to furnish reasonably adequate service and facilities. The charge made by any public utility . . . shall be reasonable and just, and every unjust or unreasonable charge for such service is prohibited and declared unlawful.

Paragraph 196.05. *Utility property valuation.* The Commission shall value all the property of every public utility actually used and useful for the convenience of the public.

As Bennett [1931, pp. 2-3] argued, “The legislature empowers the Commission to fix just and reasonable rates but is silent, utterly silent as to the principles or the policies which are to be controlling in the determination of reasonableness”. Commons [1907b, p. 223] agreed, stating

Herein the law is elastic enough to offer the opportunity for ingenuity and experiments that may combine the principle of State regulation with that of private initiative, thus circumventing the probable damaging effect of government regulation or enterprise and initiative and on the investment of capital for extensions and improvements.<sup>10</sup>

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<sup>10</sup> This same critique of manipulability/subjectivity of accounting is evident in McGraw's [1984, p 31] criticism of earlier efforts by Charles Francis Adams to incorporate a “reasonable return” for the regulation of railroads in Massachusetts in the late nineteenth century:

The Massachusetts approach (to rate regulation) rested on three premises, each of which could as well apply to twentieth-century utilities as to nineteenth-century railroads. First, any determination of the “reasonableness” or “fairness” of rates must inescapably remain a subjective undertaking. Scientific precision in rate-setting is therefore a practical impossibility. Second, the pricing function is part of corporate management, a function jealously guarded by all business executives, and with good reason. Third, the rate question directly reflects the debate over competition versus monopoly. In the case of nineteenth-century railroads, rates were the means through which an impersonal market signaled its ability or inability to cope with two conflicting forces: with the economic requirements of railroading in particular, and “natural monopoly” in general; and with the non-economic requirements imposed by society.

Thus, despite the appearance of being concrete, the abstract notion of rate of return as represented in the *Wisconsin Public Utility Law of 1907* remained manipulatable by big business. Commons [1934, pp. 125-126] later attributed this result to the underlying nature of the political process employed in piecing together the legislation:

In the negotiations leading up to the Public Utility Law of 1907, the joint legislative committee did not rely so much upon public hearings required by "due process of Law," where everybody has a lawful right to be heard and the conflicting opinions are [reconciled], as upon private and even confidential conferences with the leaders of the interests to be brought under the law, where concessions could be made and the investigations of experts could be weighed and balanced. . . . It was the general class of negotiations which I afterwards defined as "rationing transactions" distinguished from managerial and bargaining transactions. I could tell [before the enactment of the law] just how the Railroad Commission would administer and interpret the law. This foreknowledge enabled us to greatly condense the bill, leaving a huge field of investigation and discretion to the Commission, instead of inserting into the law a multitude of minute details, so familiar and so often conflicting in American legislation.

Despite the apparent motive to accommodate business interests, one can argue that Commons' motive was more to strike a balance the powers of government and business. On this point, departing from such other pragmatists of the period as Ely's veneration of Germany, Commons [Democracy: The Best Basis for Reconstruction, *Milwaukee Journal*, July 28, 1918] observed that:

We have learned in all democratic countries of the world one important lesson from the way which Germany's power has been built up and used. The democratic nations have learned to dread Socialism. Prussia is the modern exhibition of state Socialism. And government ownership of railways in Germany is probably the main instrument by which the power of autocracy has been built up in that country. Other nations dread government railroads when controlled by autocracy and military power, for it means that the railroad system can be used to dominate the business people, and to bring submission on the part of labor.

Commons thus saw the role of effective rate setting to be as much about preventing state governments from reducing the rates of utility companies to the point where the state actually runs the utility or defacto confiscates its property, as it is about protecting society from exploitive monopolies [Horwitz, 1992, pp. 145-167].

*The Legacy of Reasonable Value: Constraint or Flexibility?*

While a precise rate percentage could in fact be set by the State under the rate of return approach, the income and asset base to which it applies could still be manipulated by utilities. For example, in their seminal economics work in the area, Averch and Johnson [1962, pp. 1052-1055] developed a model which suggests that because of the asset base used for determining prices, rate of return regulation actually encourages utilities to bias their input mix toward capital, i.e., by artificially increasing the asset base, more money could be made at the established rate, with the increased cost passed on to consumers. Because of rate of return regulation, utility resources would be inefficiently allocated, thereby decreasing consumer welfare. Utility managers would also not be motivated to reduce expenses, thereby once more decreasing consumer welfare. Employing the agency theory perspective, this reasoning was supported by Abdelkhalik, [1988, pp. 144-145] for example, who observed fully four score years after Commons' work that:

Incentive problems arise in the electric utilities industry as a consequence of the institutional and legal arrangements of the cost-plus pricing regime under which natural and statutory monopolies operate. In the United States, such monopolies operate under a cost recovery system that gives the firm a mechanism by which it can shift all or part of the cost of "moral hazard" risk to consumers, who then become the residual claimants. In this setting, expense accruals have a more direct link to the firm's cash flows than is the case in unregulated industries. In particular, pricing a monopolist's output at cost-plus means that accruing expenses generates sales revenues for utilities. Consequently, agency cost can be included in the allowable cost passed on to consumers. The result is that the residual loss is shared between the consumers and shareholders with two competing consequences: (1) it would be in the best interest of shareholders to provide managers with incentives to shift all costs to the consumers; and, by the

same token, (2) it would be in the consumers' interest to persuade regulators to challenge the cost assumptions underlying the firms' requests for revenue requirements [see also Sappington, 1980, pp. 363-370; and Baron and Myerson, 1982, pp. 911-915; who modified the general agency theory model to better reflect regulated contexts].

Seeking to understand whether managers serve shareholders or consumers, as influenced in their compensation systems, Abdel-khalik conducted an empirical examination of the U.S. utility industry. Consistent with Averch and Johnson's [1962, pp. 1059-1065] theorizing, he found that after controlling for the effects of size, the "padding" of operating costs and over capitalization are, indeed, associated with higher manager compensation. Thus, utility managers are actually rewarded for passing on cost inefficiencies to consumers. But, would the paradox have been a revelation to Commons?

According to McGraw [1984, pp. 59-60], it was generally recognized in the Progressive era that there arose interpretive problems and internal instabilities in actually applying the concept of reasonable rate. A cost-plus formula relies on assets (before or after depreciation), on operating costs (included or not included), and asset valuation procedures (market, book, etc.). All of these possibilities lead to various incentive problems, as McGraw [1984, p. 60] concludes:

In practice, these problems promoted the rise of ingenious accounting methods by corporations, all calculated to maximize revenues in the face of regulatory limits of percentage rates of return. At worst, they made the process of rate regulation a ritualistic charade, played out in the form of full-scale "rate-cases" as part of the routine operations of commissions. Such cases conducted under elaborate procedural laws, often turned into extremely laborious hearings dominated by lawyers and engineers, incomprehensible to the ordinary citizen.

Maxwell concurred with McGraw's [1956, p. 202] observation, stating:

In spite of the Progressives' campaigns against monopoly, the administration unwittingly fostered monopoly in the process of regulating many public service corporations. Because the Railroad Commission lacked a yardstick for measuring unit costs, it tended to guar-

antee a fair return and profit regardless of the efficiency or inefficiency of the operations of a power plant, water works, or street railway. The physical evaluation of properties was only a partial check against inefficiency and the trend was toward higher rates to compensate for rising costs.

In contrast with other pragmatists of his era, Commons, overtly recognized the political nature of government administration that socially constituted such regulations as the *Wisconsin Public Utility Law of 1907*. Unlike others of his era who thought that the, "act of organization was intrinsically an ethical act vital to human nature and to society," [Hamilton and Sutton, 1989, p. 15], Commons [1965, p. 109, emphasis added] had no illusion of the purity of the Wisconsin's bureaucratic structure nor of the neutrality of forms of accounting it deployed:

Social organization is *psychic*, and consists of those *coercive sanctions* which subordinate individuals to a single will, notwithstanding their inclinations to satisfy their desires at cross purposes in their own private ways. Organization is not originally the free persuasive grouping of men for mutual satisfaction, but is an alternative forced upon them by increasing population and increasing struggle for existence. Upon the utilitarian explanation, organization would be immoral, for it tends to suppress the individual to the passions of a few. As it is, *organization is neither moral nor immoral — simply necessary*.

Thus, Commons saw monopolies as not "natural," but "artificial" in character, and their regulation by state governance structures that employed accounting as necessary, however flawed. Yet, the use of accounting did ostensibly exhibit the values of rationality, neutrality, objectivity, economy and control, but these values were inherently interpenetrated with conflict between opposing interest groups seeking to control the bureaucratic structure of government. Specifically, Commons saw even accounting concepts he himself advocated as inherently flawed. For example, he saw market value and reproduction cost as circular as applied by the courts in trying to ascertain what was "reasonable." According to Horwitz [1992, p.162]:

[Commons'] penetrating — though often obscure — *Legal Foundations of Capitalism* [1924] traced the late nineteenth century judicial shift to a market value standard. The Rate Cases, in particular, allowed Commons

to appreciate that it was the guarantee of a future income stream that determined present value of property. 'All value is expectancy' Commons proclaimed. In rate making cases, market value is the present value of expected rates. If the rates are unreasonable, so is the market value. Judges who believed that reasonable rates could be deduced from fair market value were "reasoning in a circle," Commons declared.

### *Theoretical Interpretation*

March and Olsen [1983, pp. 265-295] offered a framework useful in understanding this apparent paradox of power and politics embedded within institutional economics, such as evidenced in the regulatory reform efforts undertaken by Commons under La Follette's direction. They reasoned that such reform efforts were symbolic events which represented a history and embodiment of two forms of political rhetoric. The first, or "orthodox administration" form, represents the official language of laws and regulations which promote reorganization, and speaks in terms of managerial leadership, administrative structures and procedures for facilitating efficiency and effectiveness within bureaucratic structures. It invokes the overall guidelines and values of rationality, neutrality, objectivity, economy and control.

But here, a paradox of bureaucratic action arises: If the impersonal, bureaucratic machinery of rationality is allowed to proceed unchecked, this very rationality would become unresponsive to shifting human values and hence potentially abusive in the exercise of bureaucratic power. Thus, the second form of rhetoric, "realpolitik," arises, which holds that bureaucratic structures and claims to neutrality, objectivity and rationality represent dangerous illusions and threats to the governed unless they are linked somehow with the values, beliefs and goals of the populace and its various constituent groups. Thus, realpolitik recognizes the value of conflict between opposing interest groups which seek expression though and control of the bureaucratic structure of government. Politics becomes stylized or encoded within the litany of bureaucratic structure, as in Commons' case — in the form of accounting rhetoric. More specifically, March and Olsen [1983, p. 283] observed that

The rhetoric of realpolitik is an empirical and prescriptive counterpoint to an orthodox administrative perspective. To the emphasis on managerial control, it jux-



taposes an emphasis on political control. It argues that a single individual has neither the cognitive capacity, nor the time and energy, nor the moral and representational standing assumed by the [orthodox administration] perspective.

March and Olsen went on to observe that most political actors, and in the case of Commons, academic/administrative actors, recognize and even can recite either form of rhetoric when necessary, and taken together, these two forms establish a fairly exhaustive frame of reference for understanding bureaucratic structure and action in American government. March and Olsen [1983, pp. 291-92] concluded that while they are fairly exhaustive, the two forms of rhetoric are not mutually exclusive, but rather are interpenetrated:

Such a perspective may provide an interpretation of the cultural ritual of reorganization and of the rhetorical duality of that ritual. The rhetoric of administration and the rhetoric of realpolitik are mutually supporting and are embedded in a culture in which each is important. The ritual of reorganization is a reminder of both sets of beliefs and testimony to their efficacy. On the one hand, a commitment to administrative purity is made tolerable by an appreciation of realpolitik, much as a commitment to personal purity is made tolerable by an appreciation of human weakness. At the same time, a commitment to realpolitik rhetoric is made consistent with human hopes by a faith in the imaginability of improvement through human intelligence. It should not be surprising to find that both rhetorics survive and thrive, and that both find expression in the symbols of reorganization. The orthodoxy of administration is the voice of the prologue to comprehensive administrative reform; the orthodoxy of realpolitik is the voice of the epilogue; the myths of the first shade into the myths of the second over the course of a major effort at reorganization; and both sets of myths are needed for a normatively proper interpretation of the reorganization saga. . . . [These] rhetorics exhibit and reaffirm fundamental social values, particularly those associated with personal efficacy, with intention, interest, power and rational choice.

March and Olsen [1983, p. 291] urged that the two rhetorics not be interpreted as deceptions for subverting public attention and diverting public resources, but rather as symbols of the possibility, the hope for effective government reform.

It appears that among the pragmatists at least Commons was well aware of the covertly political attributes of specific, accounting-based techniques he himself advocated. Consistent with other institutional economists [e.g., Dewey, 1910, 1922; Veblen, 1904, 1919], Commons did criticize the "pecuniary calculus of accounting" [see Merino, 1993, pp. 164-165]. But in addition, Commons also redirected accounting and deployed it in support of government intervention vis-a-vis regulation. Here, accounting performed two roles. First accounting was deployed in the hope of making the private public by rendering the inner workings of such monopolies as utilities transparent to regulators. And second, accounting rendered conflicts of interest as discursive affairs as compared to physical conflict in the form of boycotts, picket lines and armed Pinkerton agents typical of the era. This use of accounting aided in bringing confrontations from street and rail-level violence to the negotiating table [McGraw, 1984, pp. 77-93]. More specifically, exhibiting marked reflexivity, Commons [1965, pp. 99-100; emphasis added] asserted that:

The State is primarily coercive, but where technical work has been absorbed by it, just as its officials must be equipped in knowledge and skill, they must also learn tact. Penology, pedagogy, "scientific" charity, are highly successful only *when the iron hand of coercion is gloved by the arts of persuasion*. The state extracts coercion from private hands in order that the latter may be compelled to rely on persuasion, and the criterion for the success of state coercion itself is the extent to which the officials have learned to make it unnecessary. The state is, indeed, becoming more persuasive and less coercive in proportion as the officials recognize their position as public servants, and the people become upright and patriotic in character.

Thus, accounting is not only an instrument for representing an economic reality as proposed by proprietary theorists, but also a rhetorical device for setting forth the concept of reasonable value which makes rage, coercion, physical force, unreasonable.

### CONCLUDING COMMENTS

The analysis provided in this paper suggests that the contributions of John R. Commons in the development of accounting in the governance structure of the state and the regulation of monopolies is underrepresented within extant academic ac-

counting literature. More specifically, Commons' work in Wisconsin, which spread to other states and the federal government, appears to be important to understanding and making possible state governance, and this governance in turn, makes accounting and accountants possible. Harter [1962, pp. 210-212] concluded that while Commons is comparatively obscure in American history, his leadership in the drafting and adoption of social legislation entitles him to more attention than he has so far received. Harter [1962, p. 128] further states that "No single man was responsible in bringing it (social legislation) about, but if anyone could be called its father, he would be John R. Commons." Similarly, Horwitz [1992, p. 162] observes that "The first thinker to see the relationship between the de-physicalization of property and its abstraction into market value [key concepts within accounting theory] was the great Wisconsin institutional economist John R. Commons." Commons' legacy is still very apparent as seen in recent efforts to deregulate the utilities industry:

"We're cutting through 100 years of sedimentary layers in trying to make the market for power work better," said Gary J. Lavine, senior vice president at the Niagara Mohawk Power Corporation in Syracuse. . . . The central quandry is that much of the existing investment in electrical power . . . is more expensive than the cost of starting over with a clean sheet of paper. As a result, utilities contend, the only way to provide big electricity savings quickly would be to deny investors a fair return on hundreds of billions of dollars of financial commitments that with hindsight should never have been made. That, they say, would be unconscionable. . . . "Regulators made promises to investors, and government has a moral obligation to honor them," said Alfred E. Kahn, an economist at Cornell University [*New York Times*, 2/3/95, p. C1].

The work of John Commons has an interrelated theme with that of DR Scott [1931, p. 133], who suggested that the development of accounting ". . . must be provided for within the process of cultural change . . ." thereby emphasizing the importance of such issues as: the social creation of accounting; how alternative sets of meaning are attributed to accounting; and the presence and influence of competing interest groups within organizations and society who differentially deploy accounting to serve their own vested interests. Scott [1931, p. 264], for example, called

attention to accounting being complicit in the creation of organizational managers' reality, both in terms of determining the goals of management as well as the means to achieving those goals; he stated "Accounting and statistical methods are serving as vehicles of the current cultural reorganization because of their limitation of expression to objective terms" [see also Ijiri, 1967, pp. 158-159].

Similarly, as March [1987, pp. 38-40; emphasis added] observed in a plenary speech before the American Accounting Association:

These components of decisions and decision processes are not unfortunate manifestations of an irrational culture. They are important aspects of *the way organizations develop the common culture and vision* that become primary mechanisms for effective action, control and innovation. As a result, information strategies are as much strategies for managing, interpreting and creating visions as they are strategies for clarifying decisions. And if this sometimes seems perverse, it may be well to remind ourselves that human life is, in many ways, less a collection of choices than a mosaic of interpretations. *It involves both discovering reality and constructing it.*

Thus, there appears to be a core appreciation among the loosely defined group of institutional economists that political rationalization vis-a-vis economic rationalization became *the* means of attaining both order in the economic sphere and security in the political arena [Scott, 1931, pp. 34-61]. On this point, Hopwood [1990a, pp. 83-88; 1990b, pp. 10-16] has argued that accounting is centrally implicated in the institutional frameworks, language and patterns of power and influence that characterize contemporary organizations. It follows that accounting practices evolved in a manner which involves more than merely formulating and legitimizing economic actions, but also in preserving the status quo vis-a-vis power of specific business and political actors. The power of accounting derives from its ability to move beyond merely facilitating the operation of pre-given and relatively unproblematic forms of economic management, such that accounting categories take on a visible, rule-like status in social thought and action, thus transcending even social and political considerations. Consequently, research interest in accounting should not be conceived as purely a technical one of improving its ability to passively represent an objective eco-

conomic reality, but also stands for much broader issues by which patterns of power and influence are developed and maintained as they concern the nexus linking the organization with society. As Scott argued, such rationalized administrative policies and practices as accounting did not emerge as a *consequence* of widespread concern for operational efficiency, but as an *artifact* of the power nexus linking economic and political spheres of influence.

Commons' use of accounting as an orthodox administration form of rhetoric, and his role in developing it as influenced by the rhetoric of realpolitik [March and Olsen, 1983, pp. 285-295], was essentially reflexive in nature. That is, as an external critic of monopolies, he challenged such general concepts as accounting profits as aligned with socially dysfunctional behavior. He was also cognizant of the flaws in specific techniques he himself developed as being subject to influence by vested business interests, that his rate of return remained "elastic" and "manipulable" by the very monopolies to which it was applied. However, he saw such calculative practices of governmental regulations as a necessary aspect of a modern, organization-based society. As March and Olsen [1983, p. 292] suggest:

[Our] observation is that governance is an interpretation of life and an affirmation of legitimate values and institutions. In a society that emphasizes rationality, self interest, and efficacy, politics honors administrative and realpolitik rhetoric, it provides symbolic and ritual confirmation of the possibility of meaningful individual and collective action. The argument is not that symbols [such as the rationality and objectivity achieved through accounting] are important to politics, although they certainly are. Rather, the argument is the reverse — that politics is important to symbols, that a primary contribution of politics to life is in the development of meaning. It is not necessary to decide here whether decision making and the allocation of resources are symbols and the construction of meaning are more fundamental. They are heavily intertwined, and discussion of primacy may obscure that fact. But it seems unlikely that a theory of governance can represent or improve the phenomena of governing without including the ways political institutions, rhetoric, and the rituals of decisions facilitate the maintenance and change of social values and the interpretation of human existence.

Thus, accounting as a symbol of rationality, efficiency and science within state governance came to be politically constituted as opposed to being solely the product of rational actions and events within the private sector. That Commons' "reasonable value" and rate of return regulation impacted accounting and economic thought is attested to by its use in regulating utilities for most of this century and by research in economics and accounting probing its efficacy for over eighty years [illustrative are Averch and Johnson, 1962, pp. 1052-1055; Sappington, 1983, pp. 363-370; Baron and Myerson, 1982, pp. 911-915; Abdel-khalik, 1988, pp. 44-62; Lanen and Larcker, 1992, pp. 71-81].

To be sure, Commons recognized imperfections in the state apparatus in general and the techniques of regulators in particular, that there exists no universal truths as represented by economic "laws" and accounting "facts." A "coping schizophrenic" [Campbell, 1970, pp. 1-23], he nevertheless continued to struggle with the paradoxes of his era. According to Hoksbergen [1994, p. 708]:

On the one hand, there are what might be called extreme relativists, who upon the discovery that there is no objectively certain foundation for the true, the good, or the beautiful, jump to the conclusion that nothing matters. On the other hand, there are those who accept the demise of foundationalism and acknowledge the existence of many different traditions of understanding but still have a deep sense that it does matter, that there is meaning to our lives, and that we can continue the struggle to improve our understanding and our lives. I am persuaded by the latter position, and because the participants in the debate [such as John R. Commons] have cared enough to write down their thoughts on the issue, I presume they are persuaded, at least in practice, by that position too.

#### REFERENCES

- Abdel-khalik, R., "Incentives for Accruing Costs and Efficiency in Regulated Monopolies Subject to ROE Constraint," *Journal of Accounting Research* (Supplement 1988): 44-174.
- Adams, H. C., "The Relation of the State to Industrial Action", *Publications of the American Economic Association*, Vol. 7 (1887): 61-64.
- \_\_\_\_\_, *Railways in the United States in 1902*, Washington D.C.: U. S. Government Printing Office, 1903.
- \_\_\_\_\_, *American Railway Accounting: A Commentary*, New York: Holt (1918).

- Averch, H., and Johnson, L. L., "Behavior of the Firm Under Regulatory Constraint," *American Economic Review*, (August 1979): 1052-1069.
- Baron, D., and Myerson, R., "Regulation of a Monopolist with Unknown Costs," *Econometrica* (Winter 1982): 911-930.
- Bennett, E., *Brief to Bill 715 Relating to Valuation of Property of Public Utilities*, Madison, WI (March 31, 1931).
- Campbell, J., *Myths We Live By*, New York: Bantam (1970).
- Churchman, J. H., *Federal Regulation of Railroad Rates 1880-1898*, Madison: University of Wisconsin Press (1976).
- Commons, J. R., *The Distribution of Wealth*, New York, McMillan (1893).
- \_\_\_\_\_, *Social Reform and the Church*, New York: Crowell (1894).
- \_\_\_\_\_, *Representative Democracy*, New York: Bureau of Economic Research (1900).
- \_\_\_\_\_, *Proportional Representation*, New York: Kelley (1907a).
- \_\_\_\_\_, "The Wisconsin Public Utilities Law," *The American Review of Reviews* (August 1907b): 221-224.
- \_\_\_\_\_, "How Wisconsin Regulates Her Public Utilities," *The American Review of Reviews* (August 1910): 215-217.
- \_\_\_\_\_, "Complete Victory for Physical Valuation," *La Follette's Progressive Magazine* (March 8, 1913): 291-292.
- \_\_\_\_\_, *Industrial Goodwill*, New York: McGraw Hill (1919).
- \_\_\_\_\_, *Races and Immigrants in America* (1920).
- \_\_\_\_\_, *History of Labor*, New York, McMillan (1921).
- \_\_\_\_\_, *Legal Foundations of Capitalism* (Madison, WI: University of Wisconsin Press (1924).
- \_\_\_\_\_, *Institutional Economics, Its Place in Political Economy*, New York: Macmillan (1934).
- \_\_\_\_\_, *A Sociological View of Sovereignty*, New York: Augustus M. Kelly (1965).
- "Democracy: The Best Basis for ReConstruction," *Milwaukee Journal*, July 28, 1918.
- Dewey J., *How We Think*, New York: D. C. Heath (1910).
- \_\_\_\_\_, *Human Nature and Conduct*, New York: The Modern Library (1922).
- Doan, E. N., *The La Follettes and the Wisconsin Idea* (New York: Rinehart, 1947).
- Dorfman, J., *Institutional Economics: Veblen, Commons and Mitchell Reconsidered*, Los Angeles: University of California Press (1964).
- Ely, R. T., *The Labor Movement in America* (1886).
- \_\_\_\_\_, *Political Economy*, New York: Chatauqua (1889).
- \_\_\_\_\_, *Monopolies and Trusts*, New York: Macmillan (1900).
- \_\_\_\_\_, *Property and Contract in Their Relations to the Distribution of Wealth*, New York: Macmillan (1914).
- \_\_\_\_\_, *Outline of Economics*, New York: Macmillan (1931).
- Greek, C., *The Religious Roots of American Sociology*, Garland Publishing (1992).
- Haber, S., *Efficiency and Uplift: Scientific Management in the Progressive Era*, Chicago: The University of Chicago Press (1964).
- Hamilton, G. G. and Sutton, J. R., "The Problem of Control in a Weak State: Domination in the United States, 1880-1890," *Theory and Society* (1989): 1-46.
- Harter, L. G., *John Commons: His Assault on Laissez-faire*, Corvallis, OR: Oregon State University (1962).

- Hays, S. P., *Conservation and the Gospel and Efficiency*, Cambridge, MA: Harvard University Press (1959).
- Hoksbergen, R., "Postmodernism and Institutionalism: Towards a Resolution of the Debate on Relativism," *Journal of Economic Issues* (September 1994): 679-713.
- Hofstadter, R., *The Age of Reform*, New York: Vintage (1951).
- Hopwood, A. G., "Accounting and the Pursuit of Efficiency," in A. G. Hopwood and C. Tomkins (eds.) *Issues in Public Sector Accounting*, Oxford: Philip Allou (1984): 167-187.
- , "Ambiguity, Knowledge and Territorial Claims: Some Observations on the Doctrine of Substance over Form: A Review Essay," *British Accounting Review*, Vol. 22 (1990a): 79-88.
- , "Accounting and Organizational Change," *Accounting, Auditing and Accountability Journal*, Vol. 3 (1990b): 7-17.
- Horwitz, M. J., *The Transformation of American Law 1870-1960: The Crisis in Legal Orthodoxy*, New York: Oxford University Press (1992).
- Ijiri, Y., *The Foundation of Accounting Measurement: A Mathematical Economic and Behavioral Inquiry*, Englewood Cliffs, NJ: Prentice Hall (1967).
- Jarrell, G., "Pro-producer Regulation and Accounting for Assets: The Case of Electric Utilities," *Journal of Accounting and Economics* (August 1979): 93-116.
- Jepperson, R. L., "Institutions, Institutional Effects and Institutionalism," in W. Powell and P. DiMaggio (eds) *The New Institutionalism in Organizational Analysis*, Chicago: The University of Chicago Press (1991): 143-163.
- Kolko, G., *The Triumph of Conservation*, Chicago: Quadrangle Books (1963).
- Lanen, W. N. and Larcker, D. F., "Executive Compensation Contract Adoption in the Electric Utility Industry," *Journal of Accounting Research* (Spring 1992): 70-93.
- Maltbie, M., *The Street Railways of Chicago: Report of the Federation of Chicago*, Chicago: Federation of Chicago (1901).
- March, J. G., and Olsen, J. P., "Organizing Political Life: What Administrative Reorganization Tells Us About Government," *The American Political Science Review*, Vol. 77 (1983): 281-296.
- Maxwell, R. S., *La Follette and the Rise of the Progressives in Wisconsin*, Madison, WI: The State Historical Society of Wisconsin (1956).
- McGraw, T., *The Prophets of Regulation*, Cambridge, MA: Harvard University Press (1984).
- Mereba, J., *Incentive Regulation of Electric Utilities from an Agency Theoretic Perspective: An Empirical Analysis of Accounting and Economic Variables in a Regulated Setting*, Ph. D. Dissertation, Pennsylvania State University (1994).
- Merino, B., "An Analysis of the Development of Accounting Knowledge: A Pragmatic Approach," *Accounting, Organizations and Society*, Vol. 18 (1993): 163-186.
- Miller, P. and O'Leary, T., "Making Accounting Practical," *Accounting, Organizations and Society*, Vol. 15 (1990): 479-498.
- Mills, C. W., "The Professional Ideology of Social Pathologists," *American Journal of Sociology* (1943): 165-180.
- Munn vs. Illinois, 94 U.S. 113 (1877).
- New York Times*, "A Makeover for Electric Utilities," (February 3, 1995, p. C1).
- Parsons, K., "John R. Commons: His Relevance to Contemporary Economics," *Journal of Economic Issues*, Vol. 19 (1985): 755-778.



- Roosevelt, T., "Introduction to C. McCarthy," *The Wisconsin Idea*, New York: Macmillan (1912): i-ix.
- Rose, R., "Implementation and Cooperation: The Record of MBO," *Public Administration Review* (1977): 64-71.
- Sappington, D., "Strategic Behavior Under a Dynamic Regulatory Adjustment Process," *Bell Journal of Economics* (Spring 1980): 360-372.
- Scott, DR., *The Cultural Significance of Accounts*, Kansas Scholar Book Company (1931, 1973 reprint).
- Siegel, S., "Understanding the Lochner Era: Lessons from the Controversy Over Railroad and Utility Rate Regulation," *Virginia Law Review* (1987): 243-247.
- Smith, H. R., *Government and Business*, New York: Ronald Press (1958).
- Smyth vs. Ames*, 169 U.S. 466 (1898).
- Trebing H. M., "Public Utility Regulation: A Case Study in the Debate Over Effectiveness of Economic Regulation," *Journal of Economic Issues* (March 1984): 223-250.
- Ulen, T. S., "The Market for Regulation: The ICC from 1887 to 1920," *American Economic Association* (1980): 306-310.
- U.S. Senate Hearings on the Physical Valuation of Property of Common Carriers* (Washington, D.C.: February 13-17, 1913).
- Veblen, T., *The Theory of Business Enterprise*, New York: Scribners (1904).
- \_\_\_\_\_, "The Captains of Finance and the Engineers," *The Deal* (June 14, 1919): 599-606.
- Waldo, D., *The Administrative Science*, New York: Bedminster Press (1948).
- Wiebe, R. H., *Businessmen and Reform: A Study of the Progressive Movement*, Cambridge, MA: Harvard University Press (1962).
- Wilson, W., "The Administrator," in *Congressional Government: A Study in American Politics*, New York: Meridian Books (1956).
- Wisconsin Public Utilities Law of 1907, *Laws of Wisconsin: Joint Resolutions and Memorials*, Madison, WI: State Printer (1907).
- Zucker, L., "The Role of Institutionalization in Cultural Persistence," *American Sociological Review* (1977): 726-743.

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## **THE 1826 CONTRACT FOR CONSTRUCTION OF FACILITIES AT THE PENSACOLA NAVAL STATION AND ITS IMPLICATIONS FOR HISTORICAL RESEARCH USING AGENCY THEORY**

*Abstract:* This contract dispute enhances our understanding of agency relationships and fosters greater recognition of the limitations and hazards of historical research using an agency literature framework. The accounting records, related memoranda, and reports submitted also provide insight into the nature and character of early defense contract accounting and relationships between these contractors and the government. Difficulties confronted by the Navy in securing a contractor; contract terms; civilian contractor's project accounting records, related memoranda, and correspondence with naval authorities are reviewed. The post-contract correspondence provides insight into how early 19th century government contractors attempted to resolve disputes with the government.

### **Introduction<sup>1</sup>**

Today, government is the largest consumer of products and services in the United States. Government contracting with private sector suppliers has been a constant from the earliest days of U.S. history. Modern legislation, e.g., the Federal Acquisition Regulation Act and Truth in Negotiations Act, have established standards governing contractors' dealings with the government. The Cost Accounting Standards Board has issued standards to promote uniformity and consistency in the way defense contractors measure, assign, and allocate contract costs. The Defense Contract Audit Agency, the General Accounting Office, and

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<sup>1</sup>The authors would like to acknowledge and thank the anonymous reviewers who so generously devoted time to providing constructive and well-reasoned suggestions for the improvement of this article. Without this capable input and feedback, this article would not have been possible.

other audit agencies have responsibilities for auditing compliance with contract terms. In short, doing business with the government has become highly institutionalized; contractor rights and obligations are highly circumscribed by contract, regulation, and law. A formal process for mediating contract disputes is in place, and when mediation fails there is access to the court system. In our era, this formal institutionalized framework is largely taken for granted. Such was not always the case. The contracting environment confronting the government contractor of the early 19th century stands in stark contrast to the norm of today. An appreciation for the efficacy of our current bureaucratic contracting environment can be gained by examining an early government contract. Moreover, the dangers inherent in extending modern rational expectations and assumptions to earlier periods of history become evident. Modern assumptions may be invalid in a pre-bureaucratic era where justice was more personalized and less systematized. In earlier periods, due process was less assured, and arbitrariness and personally motivated animosity or favoritism was less restrained. Such conditions may preempt and negate assumptions underlying historical research using an agency theory framework.<sup>2</sup>

In 1826, Samuel Keep of Boston received a contract from the federal government to superintend the construction of the original facilities at the Pensacola Naval Air Station then known as the Pensacola Naval Station or Navy Yard.<sup>3</sup> This 19th century contract dispute affords some insights that may contribute to our contemporary understanding of agency relations. Specifically, much of contemporary accounting agency theory focuses on instances where the agent breaches, reneges, or otherwise shortchanges the principal to the contract. In this instance, how-

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<sup>2</sup> See Max Weber's short essay on bureaucracy in *From Max Weber*, H. H. Gerth and C. W. Mills (eds), Oxford University Press 1946, pp. 216-221, for a discussion of the significant differences between justice based on personal factors and justice based on abstract procedures and rules of law.

<sup>3</sup> In 1975, the John C. Pace Library at The University of West Florida acquired the personal correspondence and accounting memoranda of Samuel Keep. Among these records are a copy of the original contract, payment vouchers for supplies and materials, payroll records, and construction progress reports as well as many letters addressed to members of his family and such notables of Keep's day as President Andrew Jackson, Vice-President Henry Clay, Senator Daniel Webster, Secretary of the Navy Samuel Southard, and William Bainbridge who was the highest ranking naval officer of the time and chairman of the Board of Navy Commissioners. These documents provide the basis for this paper and unless specifically stated otherwise all quotes come from them.

ever, it was the principal, i.e., the federal government, that re-neged on the contract despite diligent performance by the civilian contractor/agent.

Contractual relations are frequently a good deal more complicated than simple principal-agent models suggest. While simple principal-agent models may be helpful in understanding relationships, the contract under consideration in this article is complex in structure and operation. There is a hierarchy of control in this early defense contract that is typical of many modern contracts. Specifically, roles are less clearly defined than simply agent-principal, i.e., an actor may be simultaneously an agent of some principal and the principal of another agent. In this instance, both the civilian contractor and the naval officers were acting as agents of the federal government. However, from the perspective of the civilian contractor/agent Samuel Keep, the agent/naval officers were principals.

A basic assumption underlying agency theory is that all parties to a contract behave in a rational, utility maximizing manner [Jensen & Meckling, 1976, p. 307; Fama, 1980, p. 289]. Often, agency theory literature depicts actors in agency models as self-interested individuals with the goal of maximizing net income [Baiman, 1990, p. 155]. However, Mills has stated that income or wealth utility maximization alone is not sufficient to explain the behavior of all agents [Mills, 1993, p. 802]. In some circumstances, agents may seek to maximize some utility function that transcends pursuit of personal financial advantage, e.g., a sense of duty, honor, loyalty. The Keep contract provides some insight into agency relationship frictions that can not be directly attributed to income maximization. The naval authorities who were party to this contract as principals did not reap any personal advantage, and yet they were unrelenting in their refusal to honor the terms of the contract with the civilian contractor.

The Keep contract is particularly interesting because enforcement of its terms became an issue; it gave rise to one of the first defense contract disputes in American history. Contemporary agency theory presumes that contract enforcement is a matter of judicial intervention. Specifically, Baiman states:

The central focus of agency theory is the employment contract (which includes the agent's payment schedule and the monitoring system). Contracts are enforced by legal institutions. The decision of legal institutions as to whether an employment contract has been honored or

violated depends upon the evidence that can be submitted by the contracting parties to the legal enforcement mechanism. [Baiman, p. 168, 1990]

Keep's efforts to enforce the terms of his contract with the government suggest that this agency theory assumption was not satisfied in the early 19th century. The contractor's pursuit of reparations from the government through personal lobbying and pleading provides a stark contrast to the institutionalized conflict resolution assumed by agency theory.

### THE HISTORICAL CONTEXT OF THE CONTRACT

The United States bought Florida from Spain for \$5,000,000 in 1819. This transfer was formally accepted in Pensacola on July 17, 1821 by General Andrew Jackson, who was then military commander of the territory. In 1822, Congress established the Territory of Florida with Pensacola as its capitol; Jackson was appointed its first governor.

During the Napoleonic Wars, most of the Spanish and Portuguese colonies in Latin America took advantage of the unsettled conditions in Europe to break away from their mother country. By the end of 1822, Mexico and many countries in Central and South America had freed themselves from colonial rule, and the United States had formally recognized their independence. However, the three leading monarchies of Europe, i.e., Russia, Austria, and Prussia, encouraged Spain and Portugal to reassert their authority over their former colonies. In an address to Congress in December 1823, President James Monroe proclaimed that the United States would defend all independent nations of the Western Hemisphere against European intervention; this Monroe Doctrine became a cornerstone of United States foreign policy.

This backdrop of political upheaval and uncertainty provided the impetus for major military development along the southern coast of the United States. Over a period of twenty-five years a series of strategically placed forts and navy yards were built. In Pensacola, Ft. Pickens and Ft. McRee were built to guard the entrance to the port; the harbor itself became home to the first permanent U.S. Navy installation on the Gulf Coast. At the same time, fifty miles to the west, Ft. Morgan and Ft. Gaines were built to guard the entrance to the port of Mobile, Alabama. At the conclusion of this defense build-up, many passes from the open sea to important seaports were guarded by forts [Bailey, 1966, pp. 236-242].

## THE TASK

The first of the defense installations to be built was the Pensacola Navy Yard. On February 25, 1825, a bill authorizing construction of facilities for a new navy yard and depot at Pensacola, Florida was passed by the U.S. Senate, and the House gave its approval on March 3, 1825 [Pearce, 1980, p. 5].

At the time, journeymen construction workers or "master mechanics" were scarce. There was an abundance of work for such skilled workmen along the populated Eastern Seaboard. It was not easy to entice workmen to leave familiar surroundings, family and friends, to journey three weeks (under the best of sailing conditions) to a frontier town known for yellow fever epidemics and poor living conditions.

## THE PRINCIPAL

An important component of any principal's task in the principal-agent relationship is the selection of the "best" agent. The principal in this contractual relationship was the Board of Navy Commissioners, most frequently referred to in correspondence of the day as the Navy Board. This organization was charged with responsibility for letting the contract and supervising construction.<sup>4</sup> To this end, the Navy Board circulated notices soliciting bids among qualified "master builders," published invitations to bid in major newspapers, and posted notices in federal government offices. After unsuccessfully negotiating with several contractors for over a year and a half, the Navy Board concluded negotiations with Samuel Keep.

The circumstances surrounding the Navy Board's acceptance of Keep as labor contractor for the Pensacola Navy Yard are necessary background for understanding subsequent events relating to the contract. First, the Navy Board was motivated and eager to commence work on the new facilities as quickly as possible. Moreover, established and presumably knowledgeable contractors were reluctant to bid on the project or demanded compensation that the Navy Board deemed excessive. As will become apparent later, the fact that the Navy Board granted the contract to Keep is itself some measure of its desperation and

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<sup>4</sup> The Board of Navy Commissioners was created by act of Congress in 1815 and was made up of three captains (then the highest rank in the Navy). Commissioners were appointed by the President with the consent of the Senate and were invested with delegated executive authority.

frustration. Certainly, given more favorable circumstances, the Navy Board would not have awarded the contract to Keep.

Both principal and agent confront considerable risk when they enter into a contract each knowing relatively little about the other. The Navy Board and Keep had no on-going relationship, and there was an extreme degree of information asymmetry present in the contract negotiation. Given the time and distance between Boston and Pensacola (three weeks by ship down the Atlantic coastline, around Key West, and up the west coast of Florida) and the communications capabilities of the time, Samuel Keep must have been markedly ignorant of the conditions in Pensacola. By contrast, the Board was better informed. As a consequence of receiving reports from Navy personnel already in place in Pensacola, the Board was knowledgeable of local conditions at the proposed construction site. In addition, after unsuccessfully negotiating with other prospective contractors, the Navy Board knew precisely what other contractors required in terms of compensation to take on the Pensacola project. Presumably, this information asymmetry worked to the advantage of the Navy Board in its contract negotiations with Keep. In addition, Keep was totally inexperienced in bidding on government contracts. Overall, Keep must have been at a great disadvantage in contract negotiations.

From the perspective of agency theory, each party to this contractual relationship was motivated by self-interest. No doubt, Keep thought he had negotiated a contract that would allow him to break into government contracting and maximize his personal net worth. From the perspective of the Navy Board, they needed the work to commence as soon as possible at the cheapest possible rates. To this end, the Navy Board exploited the asymmetric information set they possessed and Keep's eagerness to make a start in the construction business. The Board was successful in securing below market rates for the project as evidenced by the fact that no other supplier was interested in the contract.

### THE AGENT

Samuel Keep, an unmarried man in his mid-twenties, was the youngest son of an established and prosperous Boston area builder and the brother of Dr. Nathan C. Keep who founded the Dental School at Harvard University. Keep's personal correspondence and his business records suggest that he was an articulate

and well- educated man of his time. Samuel served his apprenticeship working for his father on various construction projects in and around Boston. Previously, Keep had never been awarded or even bid a single construction contract, his very first venture as an independent builder in his own right was the Pensacola Navy Yard contract. Given Keep's personal circumstances — young, well to do, and eager to begin a business in his own right — it is reasonable to assume that he was less risk averse than an established builder. From Keep's point of view, the Pensacola contract must have looked like a great opportunity. In summary, Samuel Keep was young, inexperienced as a builder and totally unproven as a contractor. Certainly, this is not the profile of the ideal candidate for a major government contract. It seems that Keep's principal qualification was his lack of risk aversion, as evidenced by his willingness to accept the contract.

### THE CONTRACT

According to the terms of the contract signed on September 8, 1826, Keep was to go to Pensacola and superintend the construction of the wharf and buildings at the new navy yard. All construction materials including tools and implements were to be supplied by the Navy Board. Keep was to hire "8 master masons and 10 skillful wharf builders" and transport them to the project site. In addition, Keep agreed to remain in Pensacola with his builders for two years. In compensation, Keep was to receive:

\$2,000 per annum for himself and \$2.50 per day for the mechanics to be in full compensation for all the services which may be rendered by him or them and for all charges and expenses which he the said Keep may incur and subject himself to on account of this contract.

The contract provided that Keep's salary and the \$2.50 per day for the mechanics would commence with departure from Boston. Payments were to be made to Keep at the Pensacola Naval Station upon the presentation of bills to the local commanding officer.

### PRELIMINARY PREPARATIONS

Before departing from Boston, Keep recruited 8 masons and 10 wharf builders. According to Keep's correspondence, the prevailing wage in Boston for such men was \$1.75 per day. To induce men to travel to the Florida hinterlands, separated from



friends and family, Keep offered premium wages as well as food and lodging. Keep negotiated worker wage rates based on his judgment of each worker's skill and experience. Exhibit 1 is a list of Keep's crew and their associated pay rates. Wages ranged from \$2.10 to \$3.00 per day with an average daily wage of \$2.33. This was a premium of 25 percent over the existing wage in Boston without considering the value of food and lodging provided by Keep in Pensacola.

## EXHIBIT 1

Names of Mechanics who came  
from Boston Sept 15, 1827

M. C. Hopkins	=	\$ 2.50 per day
M. C. Loring	=	2.75 + Board, 2 yrs 40 ps
Wm. Ricknell	=	3.00
Benj. Goulter	=	2.50
Charles Parker	=	2.25
Thomas Whitcomb	=	2.10
Marshall Mills	=	2.10
Curtis Voss	=	2.10
Benj. Copeland	=	2.50
John King	=	2.00
Lotus Carter	=	2.50
Josh. D. Edmunds	=	2.10
Thomas Stearns	=	2.75
Wm. Knapp	=	2.10
John Beath	=	2.10
A. A. Fitts	=	2.10
Josh. Partridge	=	2.10
Nathaniel Thompson	=	2.10
Lemuel D. Wells	=	2.10

I certify that the foregoing are the names  
of the Mechanics who came from Boston  
Sept 15, 1827. & that I gave to  
each the price offered to his  
name ~~per day~~ *per day*

(Copy)

Each builder executed a labor contract (some preprinted and others handwritten) agreeing to work with Keep for two years at the Pensacola Naval Station. Exhibit 2 is an example of the preprinted contracts signed by each worker. The difference between the worker's wages and the \$2.50 government contract amount was justified in Keep's mind by the fact that he provided food and lodging for the workers and paid the cost of their transportation from Boston to Pensacola.

## EXHIBIT 2

THIS CONTRACT, made and entered into this *eight* day of *January* in the year of our Lord one thousand eight hundred and twenty seven, by and between Samuel Keep, now at and of Pensacola, W. Florida, on the one part, and *Apollas Wing* of Boston, county of Suffolk, and state of Massachusetts, on the other part, WITNESSETH. That the said *Apollas Wing*, doth hereby contract, engage, and agree with said Keep, that he will embark on board such schooner, brig, ship or other craft, as shall first sail from this port to the port of Pensacola, and there enter immediately into the service of said Keep, as *Wharf Builder* for the purpose of erecting a wharf and such structures as the U. S. Government may require at their yard or station, or such other work as said Keep may wish and require of him, in that vicinity. Said *Apollas Wing* further contracts, engages and agrees, that he will conform to the rules and regulations of the Yard or Station aforesaid, and remain in the employment of said Keep for the term of *two years*, unless the work shall be sooner completed at said station. Said *Apollas Wing* further contracts, engages and agrees, that he will at all times be subject to the controul of said Keep, that he will neither commit fraud himself or knowingly and silently allow others to practise it upon said Keep, or his interest, or the interest of the U. S. Government. The conditions of the above Contract the said *Apollas Wing* contracts, engages, and agrees effectually to fulfill and truly to abide by, for the sum of *Thirty Five Dollars per Month and board for every month he works* agreeably to the regulations of the yard. Said *Apollas Wing* further contracts, engages and agrees that said Keep shall be allowed to retain in his possession, a sum equal to the wages of one month as security for the faithful performance of this contract. The above sum of *Thirty Five Dollars per Month* to be in full compensation for all services rendered by said *Apollas Wing*, and for all expenses said *Apollas Wing* may subject himself to, on account of this contract *except board*. The aforesaid Samuel Keep, on his part, contracts, engages and agrees, that he will furnish said *Apollas Wing* with work upon his arrival at Pensacola, or the station aforesaid, for the term of two years, unless the works there to be erected, shall be sooner completed, and also that he will furnish, or cause to be furnished, all tools which may be necessary for the performance of said work, and to be responsible to said *Apollas Wing* for the payment of his wages at *Thirty Five Dollars and board* for every *Month* he shall work agreeably to the regulations of the Yard, and that at the final settlement, the whole amount of the money retained as security, shall be paid to him the said *Apollas Wing*. The above payments are to be quarterly, semiannually, or oftener, if the same can be done without injury to said Keep, and said *A.W.* shall request the same, at the U. S. Naval Station in Pensacola. And it is further agreed and understood, that if said *Apollas Wing* shall wish to send money to Boston, said Keep will render such assistance as he can, to forward said money in the most safe and economical manner.

In Witness of the above the parties have hereunto set their signatures, and affixed their seals in presence of

*Thomas L. Wentworth*

*Apollas Wing*  
*Samuel Keep*  
*by M. C. Kerfoot*

Besides hiring builders, Keep hired an accounting clerk who was charged with responsibility for maintaining project records. This clerk contracted to work for the sum of \$50 per month plus food and lodging; an amount that was approximately equal to the wages received by the master builders. The salary of the accounting clerk was not reimbursable cost under the terms of the contract; therefore, Keep absorbed this cost out of his \$2,000 per year. Surviving project records and memoranda are testimonials to the thoroughness and competence of this accounting clerk. However, one might reasonably question the business judgment of Samuel Keep; he committed better than 30 percent of his annual contract compensation for the services of a full-time bookkeeper.

The contract granted Keep permission to erect on navy yard property "such barracks or other buildings as may be found necessary and convenient for the accommodation of himself and men while employed at the naval station." The materials and labor cost for construction of the barracks were to be born by Keep. Before departing from Boston, Keep purchased a considerable amount of food, building materials for the barracks including 15,000 feet of lumber and nails, furnishings for the barracks, clothing, and medical supplies. Cash disbursement records for these purchases total \$848.98. According to the shipping contract presented as Exhibit 3, the transport of the building materials and supplies to Pensacola via Key West cost \$116. The cost of passage on the same ship for Keep and his nineteen men was \$380. Therefore, documented support exists for \$1,344.98 in cost before the first dollar of government contract money was received. Available personal correspondence and accounting records give no indication as to the source of Keep's start-up money. However, it seems reasonable to surmise that these funds were provided by his family.

[illegible]

There is no evidence of a double entry bookkeeping system in any of the project records. The financial records are single entry "day book" accounts that chronicle cash disbursements and receipts. There are no financial statements for either Samuel Keep personally or the construction project. Labor reports submitted to the officer in charge of the navy yard constituted billing under this contract. Hence, construction labor in terms of duties assigned or work performed and labor time for each of Keep's employees is fully documented.

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# EXHIBIT 4

*Mr Samuel Noye* *To the C. M. & N. Co.*

1826

Oct 26	To 4000 Shells a yd	44.00
27	To 2 pms hauling sand	0.25
Nov 3	To Cash paid for coal	5.00
7	To 10 Shells	0.25
10	To 2 pms for hauling sand from the sea	1.00
11	To 1 Shrimp	0.30
Dec 5	To 10 yds. Gent. 325, 2 yds. Eggs 75	4.10
	1 Bushel Corn meal 75	1.00
	for 1 yd. 1 yd. Ashes 100 lbs	0.50
	3 Bushels 33 Carriage Corn, 25	0.63
6	To 1 yd. Gent	3.25
8	To 4 yds. 50 1 yd. 25	0.75
9	To 5 yds. C. M. & N. Co.	3.25
	1 yd. 100	4.75
10	To 6 yds. Eggs a yd	2.25
	50 yds. 100 25	12.50
	1 yd. 100	2.25
18	To 2 yds. C. M. & N. Co.	1.50
	1 yd. 100	2.50
	1 yd. 100	2.25
	10 yds. 100	1.00
26	To 1 yd. 100	3.50
	1 yd. 100	1.00
	1 yd. 100	3.50
	1 yd. 100	2.03
	50 yds. 100, 100 yds. 100	1.50
	1 yd. 100	1.50
	1 yd. 100	0.50
	paid Carriage on sand	0.25
30	To 2 yds. 100	1.25
	E. C.	107.50
	Pensacola Nov 1 1827	

The principal project accounting records were reports of days worked submitted to the commanding officer of the Pensacola Naval Station as a basis for payment under the contract. During the developmental stages of the project all men were engaged in such activities as digging sand or felling and hewing timber for use in the construction. During this period, project reports were submitted on an infrequent basis. Between December 1826 and March 1827 three reports which covered

overlapping intervals — October 27-November 30, October 27-February 28, and February 16- February 28 — were submitted. The 5 column tabular February 16- February 28, 1827 project report presented as Exhibit 5 is typical of these reports. After February 16, project reports were submitted biweekly in a

EXHIBIT 5

*Report of work done in the Wharf, Resident and Mason's Department from the 16 to the 25<sup>th</sup> of February (inclusive), 1827*

		<i>on Commandant's Order</i>	<i>Having Timber for Wharf</i>	<i>Days</i>
1	<i>M. Hopkins</i>		8	8
2	<i>J. Ansell</i>		7 1/2	7 1/2
3	<i>A. Thresher</i>		10	10
4	<i>M. Bruchnell</i>	1 1/2	1 1/2	1 1/2
5	<i>M. Loring</i>	11	11	11
6	<i>B. Houts</i>	2	2	2
7	<i>A. Tibbitts</i>	10	10	10
8	<i>Lo: Sadtler</i>	10	10	10
9	<i>Geo: Kitch</i>	10	10	10
10	<i>J. Dammall</i>	10	10	10
11	<i>B. Webster</i>	10	10	10
12	<i>Sam: Baker</i>	10	10	10
13	<i>J. Whittier</i>	11	11	11
14	<i>J. Washburn</i>	10	10	10
15	<i>J. Hale</i>	4	11	11
16	<i>B. Bruchnell</i>	4	11	11
17	<i>J. Conzette</i>		11	11
18	<i>Th: Sawyer</i>		11	11

*Total Days 104*

*Very Respectfully*  
*Geo. R. McCall Esq:*  
*Com'g Army Post*  
*Pensacola*

## EXHIBIT 6

[illegible]

"spreadsheet" format. Exhibit 6 is typical of these reports. Beginning with the February 16-28 report, these reports show that the men were assigned to a multitude of small and large projects which were going on simultaneously. The columnar headings on these reports were consistent: workers' name, occupation (either brick layer or wharf builder), days worked (no hourly work records were maintained and the smallest time increment which appears in these reports is 1/2 day), and project (commandant's house, hospital, barracks chimney, wharf, et al.)

### THE CONTRACT DISPUTE

As noted, Keep invested a significant amount of money in performance of this contract before arrival at the job site. Upon arrival in Pensacola, Keep presented a bill for \$945 (21 days in passage for 18 men at \$2.50 per day) to the commanding officer. Unfortunately, Keep discovered that the local commanding officer, Lt. Commander Edward R. McCall, did not feel bound by the Navy Board's contract. This officer refused to pay Keep \$2.50 per man as the contract stated. Why a United States Navy officer would take it upon himself to act in this way is pure speculation. The officer's actions were clearly inconsistent with the explicitly stated terms of Keep's contract with the Navy Board. At this juncture, Keep threatened to take his craftsmen and leave Pensacola. Faced with this threat the commanding officer backed down and paid Keep. However, McCall wrote the Navy Board for instructions about how he should proceed in the future.

There is little doubt that personal animosity existed between McCall and Keep. According to Keep's correspondence, McCall referred to Keep as "You God damned Yanke." McCall was described by Keep as "a vile and intemperate man." It is evident from reading Keep's personal correspondence that he feared McCall. Early in his stay in Pensacola, Keep began carrying two loaded pistols because McCall had threatened him.

Little is known of Keep's antagonist — Edward R. McCall. However, according to the 1827 Navy Register, McCall was born in South Carolina, commissioned an officer in the U.S. Navy on January 1, 1808, and promoted to the rank of lieutenant commander on March 3, 1825 when he assumed command of the Pensacola Navy Yard [Navy Register, 1827, pp. 782]. The personal antagonism between McCall and Keep coincidentally paralleled larger historical currents. In many ways, the ill tempered relationship between Keep, a Massachusetts Yankee, and



McCall, a fiery South Carolinian, seems to personify regional animosities that afflicted the United States at this time in its history.

Subsequently, Keep submitted his labor bill for the month of October. The bill submitted included the time spent by the men building the barracks. McCall refused to pay stating that "men were not to draw wages when they did not work." As justification, Keep cited a clause in his contract which stated that he "shall not suffer for the want of materials and tools" and pointed out that the Navy had failed to provide materials to begin construction and that if the men had not built the barracks they would have been idle. Signed stores receipts show that it was not until October 27, 1826 that the navy delivered supplies and tools to Keep for the actual construction project. According to the terms of Keep's contract, it was the responsibility of the Navy to provide all tools, implements, and materials for the construction.

In response to McCall's request, the Navy Board's instructions were that he should authorize payment for the actual amount to be received by each worker and that payment should be made directly to the worker and not Keep. This is in clear contradiction of the explicit terms of Samuel Keep's contract with the Navy Board. At this point, it seems that the Navy Board summarily abrogated its contract with Keep.

Given the hindsight provided by almost 170 years, it appears that the Navy Board acted in bad faith by agreeing to Keep's terms, alluring him to the job site in the remote hinterlands, and ignoring the explicitly stated terms of the contract. Surviving documents leave little doubt that the Navy Board acted dishonorably. In the correspondence files between the Navy Board and Samuel Keep, there is no indication that the Navy found any fault with either the pace or quality of Keep's work at the Pensacola Naval Station. To the contrary, even Lt. Commander Edward R. McCall, the very same commanding officer who refused to honor the payment terms of Keep's contract, described the quality of Keep's work as "commendable."

Whether the government's conduct in this matter is an isolated incident or part of a widespread pattern of "bad faith" contract dealing is a question not easily answered. It may be that the seeds of this contract dispute lie in a personality clash between two agents of the Navy Board — Keep and McCall. Acting as agent for the Navy Board in its dealings with Keep, McCall challenged the terms of the contract and refused to dis-

burse funds according to its terms. It is significant that once McCall acted, the Navy Board never wavered in its support of his position. Perhaps, loyalty to a fellow career naval officer was the overriding motivation of the Navy Board. If this was the case, then any civilian contractor doing business with the Navy did so at their own peril. Written contracts could be ignored or completely disregarded with impunity — not a very comforting prospect for an outsider doing business with the government.

Without the difference between what he received from the Navy and what he paid the men, Keep had nothing to defray the cost of food and lodging provided to his craftsmen. Keep protested to the Navy Board and attempted to bring formal charges against McCall and Lt. Commander Thomas S. Cunningham, Sr. who succeeded McCall as commandant of the Pensacola Naval Station. Secretary of the Navy Samuel Southard's response to Keep's attempt to bring charges against the officers was simply to assert that "as a civilian Keep had no standing" that allowed him to bring charges against uniformed officers of the United States Navy. Keep was fired by the Navy Board on June 28, 1827 and accused of "practicing deception before the contract was signed in that he assured them (the Navy Board) that he could not obtain mechanics for less than \$2.50 per day when he knew that he could and that he actually did hire them for less and did put the difference in his own pocket amounting to \$3.00 per day to his own advantage."

This assertion of "deception" by the contractor sounds particularly disingenuous and implausible considering the fact that the Navy Board had unsuccessfully attempted to sign a contractor for a year and a half before awarding the contract to Keep. The Board was in a position to know the going rate of pay for skilled workmen.

A more plausible explanation is that the Navy Board chose to back the actions of its career officers notwithstanding the terms of the contract. Or, perhaps the Board concluded that they had made a bad bargain, and first tried to rewrite the contract to their liking and when that did not work they simply fired the contractor after much of the work had been completed.

In a letter addressed to his brother shortly before his July 1827 departure from Pensacola, Keep stated, "I have spent more to fulfill my contract than I should make in ten years if I should stay so long in this country for two thousand per annum." The Navy Board's flagrant disregard for his contract left Keep with little recourse. Keep left Pensacola and went to Washington to

pursue his claims against the Navy Board.

Today, in the event of a contract dispute, the issue as to whether a contract has been honored or violated is likely to be decided in the court system. Evidence is submitted according to specific rules of admissibility in an ostensibly impartial court proceeding and the contested issue is decided by judge or jury. This manner of conflict resolution has been institutionalized, is expected, and largely taken-for-granted. Such was not true in Keep's day; he did not retain legal counsel nor did he sue the government for breach of contract. At this point in our history, it seems that government was less securely based on the rule of law. Justice was more a matter of personal contact and influence.

Keep pursued his claim personally with the Washington bureaucracy. Unfortunately, Keep's experience battling the Washington bureaucracy was frustrating and dispiriting. Initially, he pursued his claim for reparations with the civilian Secretary of the Navy. In an October 1827 letter to Secretary of the Navy Southard, Keep stated: "Such has been the high handed injustice & injury to me, that I have come to the defensive action to demand redress at the bar of Congress for the severe losses I have sustained." Secretary Southard was not sympathetic to Keep's claims against the Navy, but suggested that Keep document his case and submit it to the Treasury Department for a decision on the merits of his case.

Acting on Southard's recommendation, Keep took his cause to the Treasury Department's 4th Auditor's Office which was charged with adjudicating claims made against the government. In a March 28, 1828 opinion addressed to Navy Secretary Southard, the auditor disallowed Keep's claims by declaring:

Having carefully examined the documents in the case of Mr. Samuel Keep late Superintendent referred to me by you, I have the honor to report, that nearly all the charges made by Mr. Keep appear to be founded upon an assumed violation of his rights and an improper interference in his duties, by E. R. McCall and Thomas S. Cunningham Sr. U.S.N. commanders, officers at the Pensacola Station. Not having any thing explanatory or defensive from these two officers, you will readily see the improbability of my forming any decision on the justice of Mr. Keep's claims. The vouchers to support the several items in his account are not sufficiently clear to justify me in allowing it. By letter from the Navy Commissioners it will be seen that his salary was to

cease on or about the 28th June 1827. If however these claims were to be decided on at present, without further information, according to the terms of the contract, I do not think they ought to be allowed. [[T. Matkins], 18 March 1828]

Keep was equally unsuccessful in stimulating any interest in his dispute with members of either the U.S. House or Senate. Daniel Webster, who represented Keep's home state of Massachusetts in the U.S. Senate, stated in a letter to Keep that "he could not attend to applications of this kind, that the business is between you and the Navy Board" [Keep, 23 April, 1828].

For three years, Keep remained in Washington and petitioned the government for redress for the Navy's conduct. Notwithstanding his persistent efforts to remedy the wrongs done to him by the government, he was totally unsuccessful. After termination of his contract, Keep never received another penny from the federal government.

In 1830, a week after his marriage to a wealthy Washington widow, Keep died an untimely and tragic death at the age of 29. Keep and his new bride checked into a Baltimore inn while awaiting a ship sailing to Boston. Following dinner on the evening before their planned departure, Keep drank from a stone jug thinking it contained apple cider. Unfortunately, the stone jug contained a caustic acid used for cleaning wood-burning stoves. Despite the best efforts of physicians to purge his system of the caustic acid, he lingered a week in what was described in a letter to his Boston family as "tormenting pain" before he finally died.

## CONCLUSION

As it turned out, this contract became something of a Greek tragedy. Keep's successful pursuit of the government contract to build naval facilities at Pensacola recalls the maxim, "For fools rush in where angels fear to tread." Both literally and figuratively, Keep's fatal undoing was the Pensacola Navy Yard contract with the government.

From the vantage point of 170 years, the motivation that moved the Navy Board to renege on its contract with Keep is largely speculation and conjecture. Agency theory suggests that the government agent's actions were motivated by self-interest. And yet, Lt. Commander McCall, who was Keep's chief antagonist, gained nothing monetarily from his actions. Self-interest

narrowly defined as furtherance of monetary advantage does not measure up to the task of explaining the conduct of government agents in this situation. Thus, Mills' concerns with the application of agency theory into the study of accounting history appear to be supported.

Agency theory assumes the rule of law. The legal system is assumed to enforce the contract based on publicly observable and verifiable information. At this stage in the development of our country, the rule of law was not systematized, institutionalized, and enforced without regard to the personalities involved to the extent assumed in modern agency theory. Therefore, the Keep contract demonstrates the hazards of projecting modern agency theory too far in historical research. If agency theory is to be used in historical research, its limitations must be acknowledged. Agency theory must allow for certain frictions, e.g., furtherance of personal antagonism and overriding loyalty, to afford an adequate explanation for conduct.

It is unfortunate that neither members of Congress nor representatives of the executive branch of government were interested or sympathetic to Keep's claims against the Navy. Had an institutionalized appeal process been in place, e.g., an independent and impartial civilian contract review board, perhaps Keep would have fared better.

In general, the level of literacy and competence exhibited by participants in this contract is impressive. The project accounting records and supporting memoranda are remarkable for their clarity and completeness. Contrary to the government auditor's commentary, Keep and his accounting clerk maintained meticulous records of cash disbursements and detailed reports on construction labor. For the nine months (October 1826 to June 1827) all the construction activities at the Pensacola Naval Station are completely chronicled. Construction costs, at least in terms of labor provided by the civilian contractor, are fully documented. Labor cost information was recorded in a way that facilitated cost analysis by individual structure or task, i.e., labor costs for the commandant's house, base hospital, and other buildings and structures were each tracked separately. The project financial records are the product of a rudimentary single entry system which simply chronicled cash receipts and disbursements activities in a day book format. No double entry ledgers were maintained nor were financial statements for the project prepared.

### BIBLIOGRAPHY

- Bailey, Thomas A., *The American Pageant: A History of the Republic*, Third Edition, (Boston: D.C. Heath and Company, 1966).
- Baiman, Stanley, "Agency Research in Managerial Accounting: A Survey," *Journal of Accounting Literature*, Vol. 1, 1982, pp. 154-213.
- Fama, E. A., "Agency Problems and the Theory of the Firm," *Journal of Political Economy* (1980), pp. 288-307.
- Gerth, H. H. & Mills, C. W. (eds), *From Max Weber*, Oxford University Press, 1946, pp. 216-221.
- Jensen, M. C. & Meckling, W. H., "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership," *Journal of Financial Economics* (1976), pp. 305-360.
- Keep, Samuel, "Personal Correspondence, Accounting Records, and Contracts," Special Collections, John C. Pace Library, The University of West Florida, Pensacola, Florida.
- [Matkins, T.], "Auditor's Report," 18 March 1828, Treasury Department USA, 4th Auditor's Office, Samuel Keep Special Collections, John C. Pace Library, The University of West Florida, Pensacola, Florida.
- Mills, Patti A. "Accounting History as Social Science: A Cautionary Note," *Accounting Organization and Society*, 1993, pp. 801-803.
- Navy Register, 1827 — American State Papers 024, Naval Affairs 322 (19-2), p. 782.
- Pearce, George F., *The U.S. Navy in Pensacola*, Pensacola, Florida: University Presses of Florida, 1980.

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## THE EARNED INCOME CREDIT: HISTORICAL PREDECESSORS AND CONTEMPORARY EVOLUTION

*Abstract:* The Revenue Reconciliation Act of 1993 (RRA93) significantly expanded the earned income credit (EIC), which was changed to include low-income taxpayers without dependents. Evolving, most directly, from the "workfare" plan (1972) proposed by Senate Finance Committee Chairman, Russel B. Long, and in response to President Nixon's Family Assistance Program (FAP), the post-1974 EIC was not the first of its kind. It had two predecessors.

The EIC of 1923 through 1931 benefitted taxpayers with or without dependents and excluded any "workfare" feature. A second EIC, in name only, was in effect for the 1934 through 1943 tax years.

This paper develops a historical framework for study of the post-1974 EIC. This framework necessarily precedes any investigation of contemporary issues relating to the twenty-year history of the post-1974 EIC which, unlike its first predecessor, appears destined to continue as a permanent, expanding mechanism for the delivery of basic subsistence to the "working poor." The resolution of these contemporary issues will determine whether the post-1974 EIC is destined to replace or continue to co-exist with a (presumably) more costly welfare delivery system.

### INTRODUCTION

Initially designed to partially offset the adverse and rapidly growing impact of increasing Social Security taxes on the working poor, the EIC has undergone several expansionary stages since first introduced (in its current form) for the 1975 tax year.<sup>1</sup> The Revenue Reconciliation Act of 1993 (RRA93) eliminated the separate health insurance and newborn child components of the earned income credit (EIC) and provided for a revised, basic

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I would like to thank Fritz Scheuren, Director of the Statistics of Income Division - Individuals of the Internal Revenue Service, for providing the 1989 sample data used for portions of this paper. Also, two anonymous reviewers for their insightful comments and suggestions.

<sup>1</sup> Table 3 summarizes EIC phase-in, flat, and phase-out ranges from 1975 through 1996. Exhibits 1, 2, and 3 provide graphical representations of the same.

EIC to include low-income taxpayers without dependents. This, ever-evolving, post-1974 EIC is not the first of its kind.

The first EIC was available for the 1923 through 1931 tax years. Unlike the post-1974 EIC, the first EIC was never dependency exemption-based, did not provide for a "refundable" credit, and did not, in its final form, seek to maintain any form of "workfare" or work incentive feature.

A new, revised EIC became available for the 1934 through 1943 tax years. This second EIC was a "credit" in name only. It was what today might be referred to as a "deduction" and eventually evolved into the current "standard deduction," available to non-itemizer taxpayers.<sup>2</sup>

This paper describes and distinguishes between the first (1923 through 1931), second (1934 through 1943), and current (post-1974) EICs. It summarizes events leading to the post-1974 EIC and provides a basic structural framework for analysis of the post-1974 EIC period. It reviews many of the concerns raised by contemporary policy-makers and researchers that remain unresolved (or are exacerbated) after RRA93.

The lack of widespread knowledge and acceptance of EIC advanced payment options and the failure of the RRA93 expansion of the EIC to provide for any form of wealth-based means test represent problems unlike those previously encountered by our tax collection system. However, the incompatibility of the "workfare" provisions of the contemporary EIC with existing welfare systems suggests that certain historical lessons have gone unnoticed by contemporary policy-makers.

### THE FORM OF THE EIC

The post-1974 EIC contains a "work incentive" feature, increasing its political palatability and distinguishing it from a "negative income tax" or some other form of a "guaranteed minimum income." Ammer and Ammer (1977, p. 284) define a "negative income tax" as

(a) form of welfare payment whereby all low-income individuals and families receive a direct cash subsidy from the government that is sufficient to raise them to

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<sup>2</sup>A tax "credit" results in a dollar for dollar reduction in the taxpayer's tax liability. A tax "deduction" is multiplied by a taxpayer-specific marginal tax rate to determine the taxpayer's tax liability reduction. A tax credit, therefore, is more valuable (to any taxpayer) than a tax deduction for an equal amount.



subsistence level. The subsidy itself is the negative tax. Supporters . . . argue that it could replace all other welfare programs, along with the bureaucracy and alleged waste they engender. Critics, however, believe it would remove incentives to work . . . A version of this idea was put into practice in 1975, when all U.S. social security recipients received a supplementary check for \$50, regardless of their income.

A negative income tax is a welfare program, providing a basic grant to individuals with no income. (The Aid to Families with Dependent Children - Foster Care (AFDC-FC) program is an example of a welfare program). As Exhibit 1 illustrates, the negative income tax is phased-out as income increases, until it eventually reaches zero and the individual begins to pay tax. The general form of the post-1974 EIC is also illustrated by Exhibit I. Note that the EIC provides for a variation of a negative income tax, but differs from the true form in two respects: (1) the EIC increases as the taxpayer's earned income (EI) increases and (2) a taxpayer with no EI receives no credit.

A true negative income tax would typically provide for a larger (smaller) subsidy as income decreases (increases). Therefore, the EI requirements of the post-1974 EIC, unlike other welfare programs, maintains a politically popular "workfare" element.

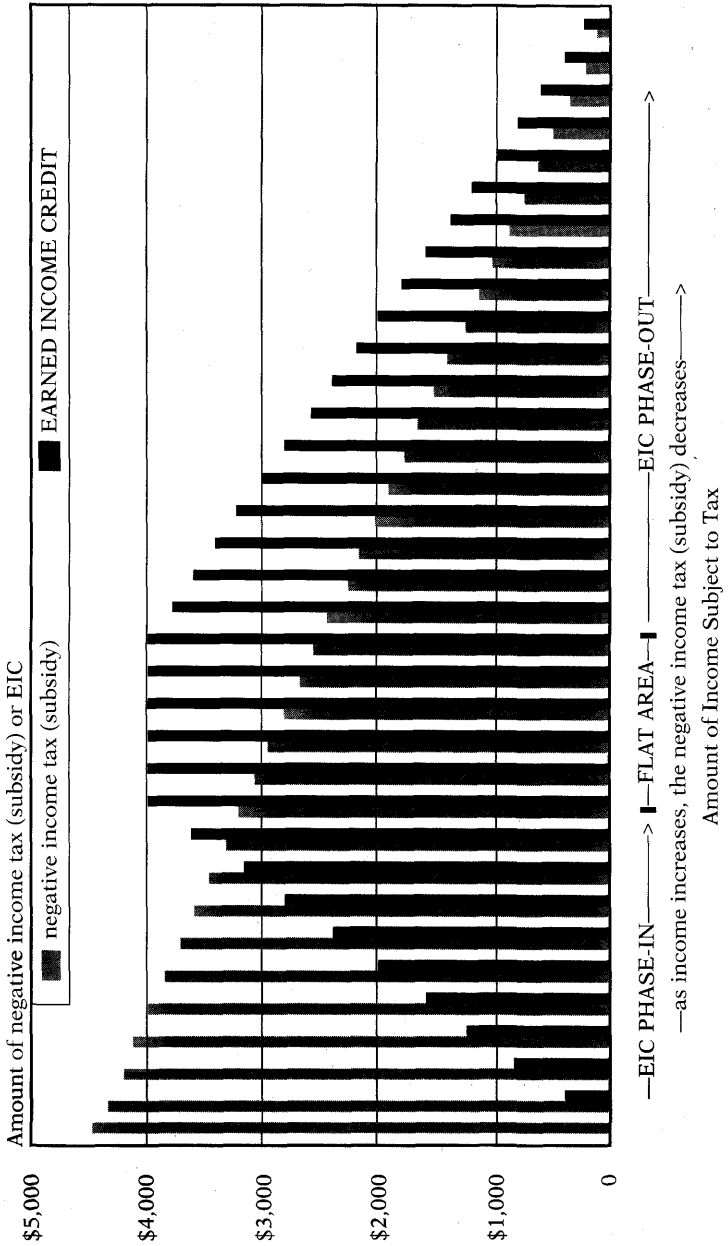
The new EI credit addresses ability-to-pay issues by reducing the impact of rising, regressive Social Security taxes on the working poor. This objective is achieved while simultaneously maintaining Social Security contributions characterized by progressive benefit structures (and based on the family unit).

The low-income taxpayers intended to benefit from the post-1974 EIC are typically not subject to progressive income tax rates. Therefore, EIC provisions are consistent with a family assistance philosophy while leaving intact the existing Social Security tax (and benefit) system.

Beginning on July 1, 1979, eligible taxpayers anticipating an EIC-based refund had the option of receiving an advanced EIC payment (AEIC), reported as a reduction of the EIC on the taxpayer's federal income tax return, and limited to the amount available for one qualifying child. In this respect, the EIC possesses a cash or near-cash feature and behaves like a negative income tax or welfare benefit to low-income taxpayers.

The successful public acceptance of this alternative to welfare programs such as AFDC-FC, etc., must necessarily precede

**EXHIBIT 1**  
**Hypothetical Illustration of negative income tax (subsidy) versus EIC**



the elimination of alternative, presumably more costly,<sup>3</sup> basic subsistence delivery systems. However, as Yin and Forman [1993, p. 951] point out, "... almost none of the recipients obtains the benefit incrementally during the course of the year" and Holt [1994, p. 759] indicates that "... fewer than 1 in 200 EIC recipients takes advantage ..." of the AEIC.

### THE POST-1993 EIC REINFORCES CERTAIN OPERATIONAL DEFINITIONS

RRA93 provides for the beneficial inclusion of low-income taxpayers without dependents for post-1993 tax years. Prior to RRA93, there was some disagreement with respect to the appropriate operational definition of the marriage tax penalty (MTP). Should the MTP include or exclude its largest component, the EIC [Rosen, 1987 and 1988, and McIntyre, 1988]?

The EIC-based component of MTPs for the 1974 through 1993 tax years might have been eliminated from consideration as true MTPs, under the assumption that such amounts were attributable to the decision to have children, as distinguished from the decision to marry. Though this point was not addressed in the literature,<sup>4</sup> the post-1993 EIC, with its beneficial inclusion of low-income taxpayers without dependents, eliminates the potential for such distinctions for post-1993 tax years. Researchers interested in the historical relevance and magnitude of post-1974 EIC-driven MTPs may find it useful to note this distinction between pre-1994 and post-1993 periods to the extent that it presents the need for research design modification.

Though the post-1993 EIC will undoubtedly result in greater MTPs [Lipman and Williamson, 1994, and Polinsky, 1993], it has evolved from a qualified dependency exemption-based poverty reduction measure, to one more inclusive of the general population. Though still "workfare"-dependent, the inclusion of

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<sup>3</sup>For example, the popular press has recently drawn attention to discussions of a return to the use of orphanages to replace AFDC-FC group homes, etc. The administrative costs of such programs include overpayments to providers, which frequently go uncollected, since the over-riding concern of such agencies is the shortage of placement facilities (see, for example, Report by the Auditor General of California, 1986).

Costs of the post-RRA93 EIC are projected to approximate about \$25 billion in fiscal year 1998, roughly 150 percent of the federal share of the AFDC-FC program [Yin and Forman, 1993, p. 951].

<sup>4</sup>This may be the result of early emphasis on supplementing and/or eventually replacing the AFDC-FC programs with the EIC. See Hoffman and Seidman [1990] and Campbell and Peirce [1980].

low-income taxpayers without dependents as potential beneficiaries links the EIC more closely with general welfare programs and reduces its similarity to the dependent-based AFDC-FC program.

## HISTORICAL FRAMEWORK

Three EICs have emerged over discontinuous periods and in very different forms: the first EIC existed for a nine year period (1923 through 1931) and the post-World War I benefits were primarily short-term, economic stimulus-motivated, and available to all taxpayers; the second EIC lasted for a ten year period (1934 through 1943) over which this "credit" evolved to take the form of our current "standard deduction;" and the post-1974 EIC has evolved and expanded during this twenty-one years and continues changing with the passage of RRA93 (1974 through 1994).

### THE FIRST EIC (1923 THROUGH 1931)

The Revenue Act of 1921, enacted November 23, 1921, and amended March 4, 1923 (see Revenue Act of 1924, H.R. 6715, Public Law No. 176, p. 264), sought to stimulate an economy recovering from World War I. Beginning with the 1923 (and extending through the 1931) tax year(s), a nonrefundable EIC was established and maintained. As described by Pechman [1987, pp. 109],

... the earned income allowance was granted in the form of a deduction that ranged from 10 to 25 percent of earned net income. In some years the deduction was allowed for normal tax purposes only; in others it was allowed for both normal tax and surtax. In all years a certain minimum amount of income (\$3,000 or \$5,000) was presumed to be earned whether it actually was or not, and the deduction was limited to a maximum ranging from \$10,000 to \$30,000. The tax value of the deduction was ... never worth more than \$495 for a family of two (in 1928-31) ...

This first, nonrefundable EIC was originally formulated under the proposition that a distinction should be made favoring (disfavoring) earned (unearned) income. The preference of a system taxing lightly income **earned** relative to that resulting from **investments** was supported under the "ability to pay" principle, but was not without difficulty in administration. The discussion of this inequity and the administrative difficulties

were addressed (see the Revenue Act of 1924, H.R. 6715, Public Law No. 176, p. 264):

The taxpayer who receives salaries, wages, and other earned income must each year save and set aside a portion of his income in order to protect him in case of sickness and in his old age, and in order to provide for his family upon his death. On the other hand, the person whose income is derived from investments already has his capital and is relieved of the necessity of saving to establish it.

The difficulty comes when an attempt is made to divide that income which is in part earned and in part unearned into the two classes. Such a segregation would involve either (1) treating as unearned that part of the taxpayer's income which represents a reasonable return upon the capital invested and considering the remainder as earned or (2) treating as earned income an amount representing a reasonable allowance as, in connection with the administration of the excess-profits tax, salary for the personal services actually rendered by the taxpayer.

Initial proposals (see Ways and Means Committee, 68th Congress, 1st Session, House Report 179, p. 78) of a 25 percent tax reduction for taxpayers whose incomes were earned would have benefitted salaried and professional people, but would have excluded farmers (currently, Schedule F income) and self-employed or small business persons (currently, Schedule C and certain K-1 pass-throughs for closely held S corporation income).

Because of the administrative difficulties in arriving at an equitable solution to the segregation of earned and unearned components of certain classes of income, the "earned" income credit became a misnomer. This first EIC was extended to **all** individuals subject to the normal tax.

Furthermore, it imposed no requirements with respect to the existence of a dependent or qualifying dependency exemption. In fact, upon review of the early part of this period, this first EIC would appear to have gone so far as to favor (disfavor) single (married) taxpayers by providing for minimum and maximum EICs of \$20 (\$12.50) and \$75 (\$55<sup>5</sup>), respectively.

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<sup>5</sup> This credit could increase to as much as \$90 when the entire personal exemption amount was taken by one spouse (i.e., married, filing separately) and in the event that no dependency exemptions were available [KixMiller & Baar, 1924, pp. 19-20].

It is important to note, however, that these provisions were designed prior to/in the absence of our post-1970 (and current) system of separate tax rate schedules for married and single taxpayers [Brozovsky and Cataldo, 1994, pp. 179-180]. During this period, two-earner, married taxpayers were effectively permitted the option of using the same progressive tax rate table twice. Therefore, the "rate" component of the marriage tax bonus (MTB) associated with the pre-1971 period tax rate schedules might, today, be perceived as more than adequately compensatory for the failure to extend **additional** preferential treatment to married taxpayers in the form of a larger EIC.

TABLE 1

**The First EARNED INCOME CREDIT  
(1923 through 1931)**

Tax Year	Total Returns			Taxable Returns		
	Total Returns	Average Wage	Average EIC	Taxable Returns	Average EIC	Average Tax Rate
1923	7,698,321	\$1,844	\$28.65	4,270,121	\$51.65	2.67%
1924	7,369,788	\$1,848	\$ 4.16	4,489,698	\$ 6.82	2.74%
1925	4,171,051	\$2,336	\$ 5.89	2,501,166	\$ 9.82	3.35%
1926	4,138,092	\$2,415	\$ 5.96	2,470,990	\$ 9.97	3.33%
1927	4,101,547	\$2,491	\$ 6.07	2,440,941	\$10.21	3.68%
1928	4,070,851	\$2,668	\$ 8.55	2,523,063	\$13.79	4.62%
1929	4,044,327	\$2,769	\$ 5.46	2,458,049	\$ 8.98	4.04%
1930	3,707,509	\$2,676	\$ 6.71	2,037,645	\$12.21	2.63%
1931	3,225,924	\$2,581	\$ 5.42	1,525,546	\$11.47	1.81%
1923-31 Averages			\$ 6.03		\$10.41	3.275%

A summary of the average EIC for total and taxable returns for the 1923 through 1931 tax years (Internal Revenue Code Section (IRC §) 1200(a) of the Revenue Act of 1924) is provided in Table 1 [SOI, 1931, pp. 37-43]. Though retained for the 1924 through 1931 tax years, the short-term, post-World War I stimulus nature of this first EIC is apparent when comparing the 1923 average EIC of \$52 per taxable return to the significantly lower average EICs for the post-1923 tax years.

**THE SECOND EIC (1934 THROUGH 1943)**

A new, revised EIC was made available for the 1934 through 1943 tax years. This EIC bore little resemblance to its predecessor.

sor. This "credit" resulted in a reduction of taxable amounts subject to the normal tax (as opposed to the surtax). Brozovsky & Cataldo [1994, pp. 173-174] state that

(u)nlike the preceding EIC, this "credit" on earned income was comparable to what is today referred to as a "deduction". This "credit" on earned income was restricted in amount to 10% of the first \$14,000 of "net income" for a maximum deduction of \$1,400 for single or married taxpayers.

This EIC evolved into a variable standard deduction (1944 through 1963), a semi-variable standard deduction (1964 through 1976), and currently takes the form of an inflation-indexed, fixed standard deduction (1977 through present), subject to phase-out and eventual elimination for the post-1990 tax years [Brozovsky & Cataldo, 1994, pp. 168-169].

#### *Events Immediately Preceding the Post-1974 EIC*

What later came to be known as the New Frontier, the War on Poverty, and the Great Society, represented the culmination of considerable discussion regarding the possibility of a negative income tax or a guaranteed minimum income or (basic subsistence) allowance as a means of perfecting or completing Roosevelt's New Deal. As described by Hildebrand [1967, pp. 1-2],

(w)ithin the first six months of 1966 alone, three important official documents . . . appeared, all of which commend the goal of universal guaranteed minimum income . . .

War on Poverty (1964) efforts originated and extended through the Kennedy (1961-1963), Johnson (1963-1969), and Nixon (1969-1975) administrations. These efforts coincided with/were overshadowed by the assassinations of President John F. Kennedy (1963), Robert F. Kennedy (1968), and Martin Luther King (1968), passage of the Civil Rights Act (1964), the "Americanization" (1965) of the Vietnam War (1957-1975) [Zarefsky, 1986], and Nixon's Family Assistance Program (FAP) [Burke and Burke, 1974].

Aaron (1978), in his forward,

. . . argues that the Great society did not fall of its own weight, but rather was eclipsed by external events — the war in Vietnam, the dissolution of the civil rights

coalition, and the political defalcations of the Nixon Administration.

The initial, post-1974 EIC closely resembled the \$400 credit or “workfare” plan (1972) proposed by, then, Chairman of the Senate Finance Committee, Russel B. Long (Democrat - Louisiana). Senator Long’s father, Senator Huey Long (Democrat - Louisiana), had been a proponent of the “Share the Wealth Society” (1934) prior to his assassination in September, 1935 [Burke and Burke, 1974, p. 151].

Russel Long had been an outspoken critic of Nixon’s FAP, for its failure to provide adequate work incentives. The FAP was rejected by the Senate Finance Committee (1972) in favor of Chairman Long’s “workfare” plan.

THE POST-1974 EIC (1975 FORWARD)

The Tax Reduction Act of 1975 provided the foundation upon which our current EIC is based. This post-1974 EIC was a delayed outgrowth of the extended period of political liberalism throughout the 1960s and 1970s.

The post-1974 EIC differed significantly from the first EIC (1923 through 1931). These differences are restated and summarized in Table 2.

TABLE 2

A Comparison of the First EIC (1923 through 1931)  
and the Post-1974 EIC

First EIC	Post-1974 EIC
Never refundable.	Refundable, and beginning July 1, 1979, as a payroll advance (AEIC).
Never restricted or based only on “earned” income.	Always based only on “earned” income.
Always available to single taxpayers or taxpayers without dependents.	First available to low-income taxpayers without dependents for post-1993 tax years (RRA93).
Introduced at a time when the same rate schedules applied to single and married taxpayers.	Introduced after separate, post-1970, rate schedules were developed for single and married taxpayers.
Pre-dated the Social Security system.	Post-dated the Social Security system.



The evolution of the contemporary EIC is divided into three distinct phases: Phase I - initial implementation (1975 through 1990), Phase II - expansion into additional, separable components for health care costs and newborn children<sup>6</sup> (1991 through 1993), and Phase III - merger of previously developed separable EIC-based components and the inclusion of low-income taxpayers without dependents (1994 forward).

Eligibility for the EIC, as modified throughout Phases I and II, included criterion for dependent (1) relationship, (2) residency, and (3) age limitations. The similarities of these early requirements to the dependency-based AFDC-FC welfare program has been mentioned previously and is apparent. The Phase III period resulted in the elimination of qualified dependency exemption requirements.

#### *Phase I (1975 Through 1990)*

The EIC, in its recent historical form, was first made available for the 1975 tax year and only to low-income workers who maintained a household for dependent children, for whom they were able to claim an exemption. Designed to reduce the impact of Social Security taxes and encourage the pursuit of employment by low-income individuals, EI includes wages/salaries (and related compensation) and net earnings (losses) from self-employment (Schedules C, F, and, potentially, Schedule E income). This EIC was the first **refundable** credit. It was treated as a tax payment and, therefore, subject to refund.

The Tax Reform Act of 1976 provided for a continuation of the EIC for the 1976 and 1977 tax years, while liberalizing the requirements for claimants. The Tax Reduction and Simplification Act of 1977 extended the EIC through the 1978 tax year. Finally, the Revenue Act of 1978 increased the amount of the EIC and made it a permanent component of the tax law.

The Tax Reform Act of 1986 provided for inflation-indexation of phaseout amounts, maximum adjusted gross income (AGI) limitations, and the maximum available EIC amount. (These amounts are adjusted, annually, according to changes in the Consumer Price Index-based measures between August 31 of the preceding year and August 31 of the current year). For the 1987 tax year, the EIC phaseout at the 10% rate began at \$6,925 (\$9,000 as indexed for post-1987 tax years) of the greater of EI or AGI (see Table III). No EIC was available for taxpayers with

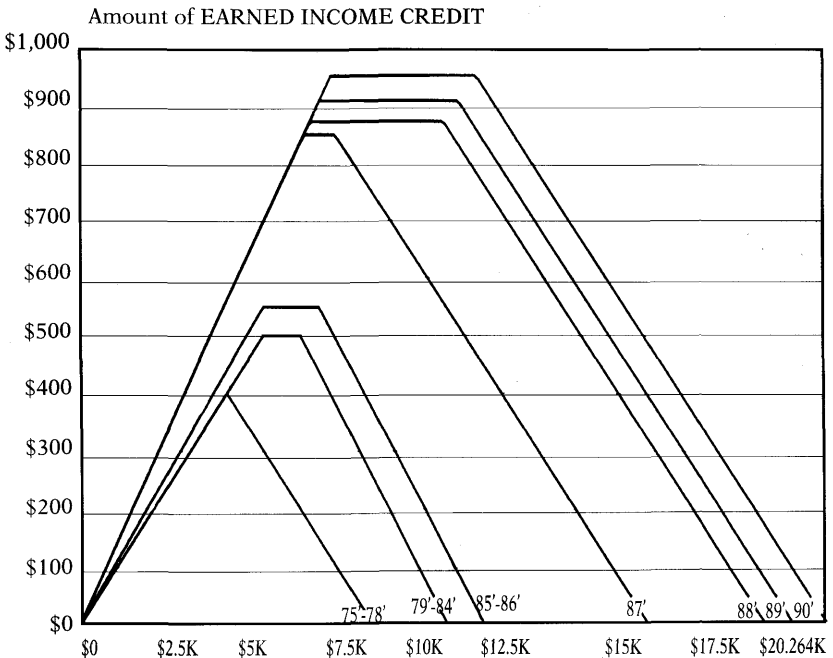
<sup>6</sup>Taken in lieu of the child and dependent care credit (Form 2441).

AGIs or EI of \$15,432 (or greater) for the 1987 tax year (\$17,000 as indexed for post-1987 tax years).

Indexation from 1987 base amounts resulted in increases of EIC phaseout amounts and EIC-based maximum AGIs of approximately 9%, 4%, 5%, 5%, 5%, and 3% (all rounded) for the 1988, 1989, 1990, 1991, 1992, and 1993 tax years, respectively. The relationship of EIC phaseout amounts to EIC-based maximum AGIs remained relatively stable throughout this post-1987 through pre-1994 period, with the EIC phaseout amounts approximating 53% of the EIC-based maximum AGIs.

## EXHIBIT 2

### Contemporary EARNED INCOME CREDIT — Phase I 1975 through 1990 (in nominal dollars)



**TABLE 3**  
**Evolution of the Post-1974**  
**EARNED INCOME CREDIT (EIC)**  
**(1975 through 1994 and 1995 & 1996**  
**before Inflation-Adjustment)**

Tax Year(s)	Qualify Dpndnts	Credit Rate	Phase- Out Rate	"Flat" Begin	Range End	Max EI or AGI	Max EIC	Avg Rfnd EIC
Phase I: Initial Implementation of the Post-1974 EIC								
1975-78	> 0	10.00%	10.000%	\$4,000	\$ 4,000	\$ 8,000	\$400	\$203
1979-84	> 0	10.00%	12.500%	\$5,000	\$ 6,000	\$10,000	\$500	\$270
1985-86	> 0	11.00%	12.222%	\$5,000	\$ 6,500	\$11,000	\$550	\$317
1987	> 0	14.00%	10.000%	\$6,080	\$ 6,920	\$15,432	\$851	\$452
1988	> 0	14.00%	10.000%	\$6,240	\$ 9,840	\$18,576	\$874	\$540
1989	> 0	14.00%	10.000%	\$6,500	\$10,240	\$19,340	\$910	\$560
1990	> 0	14.00%	10.000%	\$6,810	\$10,734	\$20,264	\$953	\$605
Phase II: Supplemental Health Care and Newborn Components Added								
1991	1	16.70%	11.930%	\$7,140	\$11,250	\$21,250	\$1,192	A
	2	17.30%	12.360%	"	"	"	\$1,235	A
	Health	6.00%	4.285%	"	"	"	\$428	A
	Newborn	5.00%	3.570%	"	"	"	\$357	A
1992	1	17.60%	12.570%	\$7,520	\$11,840	\$22,370	\$1,324	
	2	18.40%	13.140%	"	"	"	\$1,384	
	Health	6.00%	4.285%	"	"	"	\$451	
	Newborn	5.00%	3.570%	"	"	"	\$376	
1993	1	18.50%	13.210%	\$7,750	\$12,200	\$23,050	\$1,434	
	2	19.50%	13.930%	"	"	"	\$1,511	
	Health	6.00%	4.285%	"	"	"	\$465	
	Newborn	5.00%	3.570%	"	"	"	\$388	
Phase III: Supplemental Components Combined with the Basic Credit & Inclusion of Low-Income Taxpayers Without Dependents								
1994	0	7.65%	7.650%	\$4,000	\$5,000	\$9,000	\$306	
	1	26.30%	15.980%	\$7,750	\$11,000	\$23,753	\$2,038	
	2	30.00%	17.680%	\$8,425	"	\$25,300	\$2,528	
1995	0	7.65%	7.650%	\$4,168	\$5,210	\$9,378	\$319	B
	1	34.00%	15.980%	\$6,252	\$11,462	\$24,764	\$2,126	B
	2	36.00%	20.222%	\$8,779	"	\$27,090	\$3,160	B
1996	0	7.65%	7.650%	\$4,343	\$5,429	\$9,772	\$332	B
	1	34.00%	15.980%	\$6,515	\$11,943	\$25,804	\$2,215	B
	2	40.00%	21.060%	\$9,148	"	\$29,318	\$3,659	B

Note A: \$793. Not specified as a separate measure for each EIC component.

Note B: Projected at an annual inflation rate of 4.2% each for 1995 & 1996.

Exhibit 2 was developed from the information contained in Table 3 [SOI, 1977-1993] and provides a graphic representation of the contemporary EIC during the 1975 through 1990 (Phase I) tax years [SOI, 1977-1992], under the simplifying assumption that the taxpayer's EI is equivalent to their AGI. For post-1986 tax years, the slope of the phase-in (i.e., credit percentage) of the EIC increased, and, with the exception of the 1987 tax year, the flat range, over which the maximum EIC was available, increased in breadth.

However, it is generally acknowledged that during this period, the "working poor" lost ground with respect to the inflation-indexed value of exemptions. As pointed out by Sommerfeld, et al., p. 56,

... (I)n the mid-1970s a family of four began to owe an income tax only after it earned about 18-20% **over** (emphasis added) the poverty line. By the mid-1980s, the same household was required to pay an income tax after earning an income level significantly **below** (emphasis added) the poverty level. Indexation for inflation and increases in the earned income credit, the standard deduction, and the personal exemption allowed the working poor to be exempt from income tax until their income exceeded the poverty level. These changes are expected to keep taxpayers in the same position relative to the poverty line thereafter by indexing the standard deduction and exemption amount.

Table 3 summarizes key components of the recent historical EIC for the entire 19 year, post-1974 period (i.e., 1975 through 1993) under review. The following formulas, as they relate to the data summarized in Table 3, provide the basis for the calculation of the EIC for all three phases (including the separable/supplemental health care- and newborn-based EICs, not graphically depicted, but available during the Phase II period of 1991 through 1993), where the EIC is the lesser of (1a) or (1b).

**(1a) Credit Rate X Min { EI, Flat Range<sub>BEGIN</sub> }**

**(1b) Maximum EIC –**

**[ Phase-Out Rate X ( Max { AGI, EI }**

**– Flat Range<sub>END</sub> ) ]**

The flat range is that range of EI over which the EIC is maximized. The beginning of the flat range represents that EI level where the maximum EIC is first achieved. The end of the flat range represents the highest possible EI level where the

maximum EIC can be generated. Beyond this ceiling, the EIC is reduced at the phase-out rate (see Table 3).

### *Phase II (1991 Through 1993)*

For the 1991 [SOI, 1993] through 1993 tax years, additional, separable EIC components were made available for supplemental health care/insurance expenses and newborn/young child dependents. Married, surviving spouse, or head of household filing status (i.e., at least one qualifying child in the household) remained a requirement for qualification for the (1) basic, (2) supplemental health insurance, and (3) supplemental young child EICs. A new Form EIC was developed and used during this period. However, the schedules, rules, and tables associated with these separate EIC components were very difficult for the average taxpayer to understand and were eliminated/merged back to a single basic EIC form for the post-1993 period (i.e., Phase III).

Throughout the history of the Federal Insurance Contributions Act-/Self-Employed Contributions Act- (FICA-/SECA-) based Social Security and (later) Medicare tax, beginning with the 1937/1951 tax years, the amount to which an employee/employer or self-employed taxpayer was subject had been limited by a ceiling or "wage base." This wage base was adjusted through intermittent statutory or (currently) automatic inflation-indexed increases, but remained regressive. The EIC continued to partially or fully offset the regressive effects of Social Security and Medicare and promote tax progressivity.

Separate, higher wage bases were established for FICA and SECA Medicare components at 1.45% (each for employer and employee) and 2.9% (for self-employed taxpayers), respectively, during the 1991 through 1993 tax years. These increased wage bases for the medicare components of FICA/SECA coincided with the establishment and maintenance of separate supplemental health care and newborn EIC components.

### *Phase III (1994 Forward)*

For post-1993 tax years, congruent with the first EIC (1923 through 1931), low-income taxpayers without dependents are included as potential beneficiaries of the EIC.<sup>7</sup> With the post-

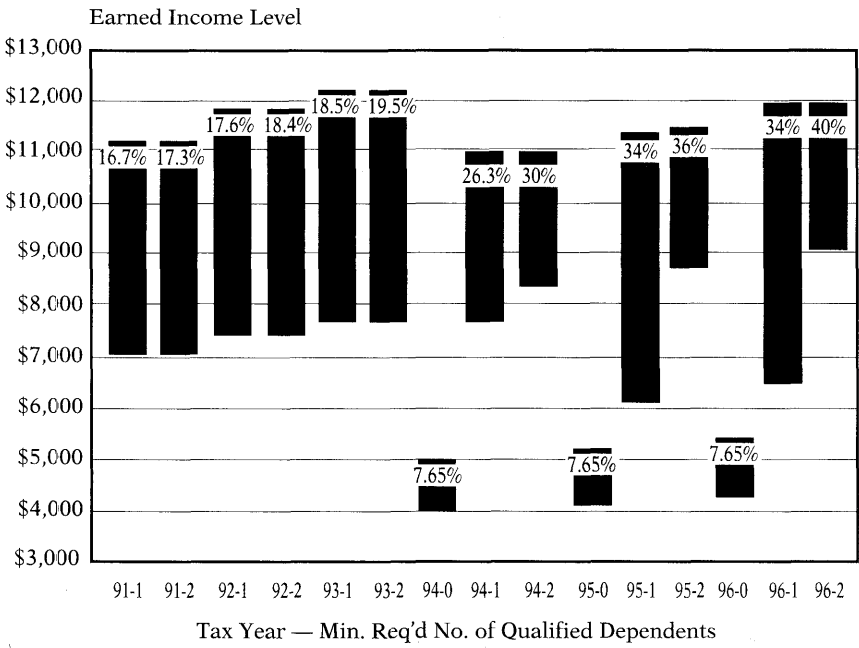
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<sup>7</sup> The EIC was originally denied to persons without children to avoid benefits to (1) students, (2) retired persons (to avoid duplication of the benefits already

1993 move toward a broader definition of the “working poor,” initially established EIC phase-in percentages equal related phase-out percentages for low-income taxpayers without dependents, and are equivalent to the rates used for FICA employer and employee contributions at 7.65% each (see Table 3).

**EXHIBIT 3**  
**Contemporary EARNED INCOME CREDIT —**  
**Phases II & III**  
**1991 through 1994 and 1995 & 1996 Projected\***

Credit Rates (Phase-In Percentages) & Flat Ranges\*



\*1995 & 1996 Projections at 4.2% Annual Inflation Rates.

provided by the credit for the elderly (Schedule R)), and (3) part-time workers with small amounts of EI.

Exhibit 3 illustrates the recent historical trend for the credit rates and flat ranges associated with post-1990 (i.e., Phases II and III) EICs. The generally upward “creeping” (or inflation-indexed) movement of these flat ranges is apparent throughout the period.

The higher wage bases established for the Medicare component (i.e., 1.45% and 2.9% for employer/employee and self-employed taxpayers, respectively) for the 1991 through 1993 (Phase II) period have been completely eliminated for post-1993 tax years, creating a “flat” or proportional tax for this (previously regressive) component of FICA/SECA. The elimination of this ceiling coincides with the establishment of the no dependent EIC inclusion for post-1993 tax years (see Exhibit 3).

### CONTEMPORARY ISSUES

The difficulties associated with the distinction between earned and unearned income in the establishment of the first EIC (1923 through 1931) were considered, addressed, and circumvented by making the credit available to all taxpayers and based on both earned and unearned income. These complications were not avoided under the more contemporary, post-1974 EIC, which attempts to create a distinction between earned and unearned income. As a result, problems, other than those encountered in the early 1920s, have evolved.

First, in providing for the separate treatment of earned and unearned income, the post-1974 EIC has included both wages and self-employment income. Such amounts are often subject to manipulation, and, as O’Neil and Nelsestuen (1994) have determined, a significant portion of EIC benefits may be providing assistance to middle-class or even very wealthy taxpayers.<sup>8</sup> Similar conclusions were drawn by Cataldo (1994) in his review of the projected trends and increased phase-in credit percentages associated with the broader, post-1993 EIC-based flat ranges.

For example, wealthy taxpayers, already involved in tax-minimizing strategies and in control of closely held corporations, might legitimately provide/manipulate the cost of their own services (i.e., salaries) to EI levels falling within their respective flat ranges, in efforts to maximize potentially refund-

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<sup>8</sup> O’Neil and Nelsestuen [1994] proposed implementation of a “cliff-based” wealth restriction measure, where the taxpayer’s taxable and non-taxable interest income and taxable dividend income might be used, in aggregate form, as a proxy for wealth and a means test for EIC benefits elimination.

able EICs. Similarly, middle- (and high-) income, self-employed taxpayers in the process of start-up or expansion, might manipulate income/expense items and even make post-year-end elec-

**TABLE 4**

**Selected Descriptive Statistics from 1989 SOI Returns  
Taxpayers Benefitting from the EIC**

AGI Class	N	Count (N) for Amounts ≥ \$910					EIC		
		Int	Div's	Sch E	Sch C/F	PALs	AMT	Mean	Std Dev
AGIs Below One Dollar (\$1):									
AGI<\$1	140	77	38	19	75	54	37	\$496	\$293
PCT TTLS	2%	23%	36%	13%	8%	50%	77%		
For All Returns (N=140; N=280 for Sch C/F) in AGI<\$1 Class									
Min		\$0	\$0	\$(7)M	\$(421)K				
Mean		\$90K	\$7K	\$(369)K	\$(6)K				
Max		\$1.9M	\$334K	\$507K	\$102K				
Std Dev		\$261K	\$35K	\$1M	\$43K				
AGIs Above Zero (\$0):									
AGI<\$1K	75	0	0	0	1	0	0	\$113	\$123
AGI<\$2K	131	0	0	1	20	2	1	\$227	\$115
AGI<\$3K	159	5	0	1	18	2	1	\$341	\$88
AGI<\$4K	207	5	1	4	28	2	0	\$467	\$97
AGI<\$5K	225	6	0	2	42	1	1	\$604	\$105
AGI<\$6K	249	9	4	5	32	0	1	\$725	\$130
AGI<\$7K	303	10	2	6	57	3	0	\$839	\$147
AGI<\$8K	323	12	3	6	52	6	0	\$860	\$142
AGI<\$9K	329	10	3	8	64	2	2	\$880	\$122
AGI<\$10K	323	11	4	5	60	1	0	\$883	\$113
AGI<\$11K	380	17	8	9	69	4	1	\$852	\$110
AGI<\$12K	374	20	4	10	62	5	0	\$761	\$97
AGI<\$13K	371	19	5	7	53	3	1	\$675	\$56
AGI<\$14K	364	24	7	8	56	2	1	\$565	\$85
AGI<\$15K	383	13	4	7	58	3	0	\$477	\$55
AGI<\$16K	339	21	3	11	54	6	0	\$380	\$44
AGI<\$17K	359	24	4	14	60	6	2	\$274	\$55
AGI<\$18K	322	22	7	8	47	2	0	\$179	\$35
AGI<\$19K	347	26	8	13	52	2	0	\$86	\$30
AGI<\$20K	93	6	2	4	14	1	0	\$18	\$9
TTLS	5,796	337	107	148	974	107	48		
PCT N	100%	6%	2%	3%	17%	2%	1%		

Notes: At AGI levels ≥ \$19,340, the EIC was unavailable (see "Max EI or AGI" column of Table 3).

M = Millions.

K = Thousands.



tions (like the IRC 179 expense election) to maximize refundable EICs.

Table 4 summarizes selected descriptive statistics for all returns qualifying for the EIC for the 1989 tax year. It was developed from the 1989 SOI Public Use File [SOI, 1992]. The maximum available EIC for the 1989 tax year was \$910 (see Table 3), therefore, this amount was selected as the appropriate breakpoint for developing the number of returns with taxable interest income (Int), dividends (Div's), Schedule E rent and royalty income (Sch E), and self-employment earnings from Schedules C and F (Sch C/F). Also provided are the frequencies of taxpayers with passive activity losses (PALs) and the alternative minimum tax (AMT), both of which are typically associated with middle-to high-income taxpayers. These amounts are summarized separately, by AGI class, and illustrate the underlying rationale for the EIC wealth restriction-based limitations advanced by O'Neil and Nelsestuen (1994) and the ever-increasing tax planning opportunities for EIC-maximization, in the absence of such wealth restrictions, described by Cataldo (1994).

Of particular interest are the mean EICs available to high-income taxpayers in the zero or negative AGI class. Generally, these are high-income taxpayers. These taxpayers are receiving EICs in average amounts in excess of those available to taxpayers below (above) the \$4,000 (\$14,000) AGI classes.

Many of these high-income taxpayers, no doubt engaged in non-EIC-related tax planning efforts, are, by chance or design, earning additional after-tax, EIC-based returns of between 9% and 14% (i.e., \$910 divided by the \$6,500 through \$10,240 flat range (1989), respectively) on potentially manipulated EI amounts.

Second, participation rates-based studies indicate that many (i.e., 14% to 25%) taxpayers, not otherwise required to file an income tax return, but qualifying for the EIC, may not be aware of the EIC-based benefits foregone through their failure to file an income tax return [Scholz, 1994]. Furthermore, "...almost none of the recipients obtain the benefits incrementally during the course of the year." The result is the "... almost total ineffectiveness of the advance payment option..." [Yin and Forman, 1993, pp. 951 & 953].

The failure to achieve very high AEIC participation rates, through public awareness of its availability, defers any progress (and administrative cost reductions) associated with the elimination of alternative welfare delivery systems. Though the Inter-

nal Revenue Service has expanded efforts to publicize the EIC program, they tend not to promote the AEIC option to minimize noncompliance [Yin and Forman, pp. 954-956].<sup>9</sup>

Third, "(s)elf-employed individuals might declare work when none had taken place in order to receive a higher value of credit" [Steuerle, 1993]. Generally, this argument is consistent with the overall trend of increasing EIC credit rate(s) (see Table 3), and their potential to exceed the combined federal and (net) self-employment tax rate. RRA93 aggravates this problem.

For example, taxpayers, with two dependent children for the 1996 tax year, might generate an EIC of 40%, while subject to a marginal federal income tax rate of only 15% (or even 0%) plus the self-employment tax rate of less than 15.3% (after adjustments), for a net "profit" of 10% (i.e., 40% minus approximately 30%) (see Table 3).

Furthermore, separate and apart from self-employment earnings over-reporting, "... nearly one in three of those receiving the credit in 1990 was ineligible" [Kirchheimer, 1993]. Again, the incentive for false reporting evolves from the fact that the EIC benefits or phase-in credit rate frequently exceeds the taxpayer's marginal tax rate (see Table 3). Additional overpayments arise from income variability, multiple employers, and those cases where both married taxpayers work and elect the AEIC option [Holt, 1994, pp. 760-762].

Finally, the politically popular "workfare" or work incentive feature of the EIC is questionable. Moore [1993, p. 106] reminds us that

(f)or people already working, the EITC will increase their overall income level in each and every range. Conventional analysis and a wide range of studies indicate the "income effect" alone tends to discourage work, since a family can attain any particular level of income with less work than in the absence of the EITC payment.

(T)he "substitution" effect of the EITC varies with each of the ranges. In the phase-in range, it encourages

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<sup>9</sup>Yin and Forman [1993, p. 954], noting the findings of a U.S. General Accounting Office report [GAO/GGD-92-132, 1992], explain that the IRS, in an effort to increase full compliance with the EIC, awarded the credit to 600,000 taxpayers for the 1991 tax year. These taxpayers failed to claim, but appeared to qualify for the credit. The IRS subsequently found that 270,000 (45%) of the awards were incorrect.

work, because the reward for an additional hour of work has increased. In the (flat) range, the substitution effect does not come into play because the credit remains at the maximum level as income is increased. Finally, in the phase-out range, the substitution effect provides a **disincentive** (emphasis added) to work, since the worker now finds that the EITC is reduced as income increases. Thus, the worker's effective wage has been reduced.

In the (flat) range, only the income effect applies, and tends to discourage work.

The ever-increasing flat range (see Exhibits 2 and 3) results only in the "income effect," and work efforts may be discouraged once achieved/surpassed. The phase-out range provides for a work disincentive. The family is richer as a result of the EIC, and additional work is less rewarding [Moore, 1993, p. 106]. These effects exacerbate the effective marginal tax rates of EIC recipients to a minimum of 34.5% (i.e., the phase-out rate of 19.5% plus the marginal tax rate 15% for the 1993 tax year).

## SUMMARY

The EIC phase-in rates have increased from 10%, for the 1975 through 1978 period, to a planned rate of as much as 40% for the 1996 tax year. Like the first EIC, established in the early 1920s, the post-RRA93 EIC is now available to taxpayers without dependents. Unlike the first EIC, expansion of the post-1974 EIC has taken the form of a "workfare"-based variation of guaranteed income or negative income tax. Increases in coverage and phase-in credit percentages have taken place prior to the resolution of problems with compliance and delivery, preventing the EIC from replacing alternative welfare systems.

Without a wealth-based restriction, the EIC cannot progress to replace traditional welfare systems possessing such features. The higher, post-RRA93 EIC benefits and/or phase-in credit rates may provide unintended beneficiaries with ever-increasing economic incentives for the "positioning" of their earned income within broadening flat ranges. Retaining the politically popular "work incentive" feature of the EIC, which is incompatible with existing welfare systems, is the very vehicle through which such manipulation becomes possible.

Those responsible for the first EIC (1923-1931) were concerned with the infeasibility of successfully separating earned

and unearned income components. They anticipated and completely avoided this latter issue, appearing to have left us with a historical lesson unlearned.<sup>10</sup> And this politically popular "work incentive" feature may not even be supported by empirical evidence when substitution and income effects are considered.

If these issues remain unresolved, the next logical step in the evolution of the EIC may remain the elimination of the "work incentive" component. However, while elimination of the need for any distinction between earned and unearned income would resolve problems associated with EIC-maximizing tax planning and provide for the elimination of concurrent transfer payment systems, a wealth-based means-test would still be necessary.

#### REFERENCES

- Aaron, Henry J., *Politics and the Professors: The Great Society in Perspective*, Washington, D.C.: The Brookings Institution (1978).
- Ammer, Christine and Dean S., *Dictionary of Business and Economics*, New York, N.Y.: The Free Press (1977).
- Brozovsky, John and Cataldo, A.J., "A Historical Analysis of the 'Marriage Tax Penalty'," *Accounting Historians Journal*, Vol. 21, No. 1 (June 1994): 168-193.
- Burke, Vincent J. and Vee, *Nixon's Good Deed: Welfare Reform*, New York, N.Y.: Columbia University Press (1974).
- Campbell, Colin D. and Peirce, William L., *The Earned Income Credit*, Washington, D.C.: American Enterprise Institute (1980).
- Cataldo, A.J., "Targeting Earned Income Credit "Flat Ranges": Subsidy-Based Tax Planning for the Working Wealthy and Middle- Class," *Unpublished Working Paper* (1994).
- Hildebrand, George H., *Poverty, Income Maintenance, and the Negative Income Tax*, Ithaca, N.Y.: New York State School of Industrial and Labor Relations (1967).
- Hoffman, Saul D. and Seidman, Laurence S., *The Earned Income Tax Credit: Antipoverty Effectiveness and Labor Market Effects*, Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, (1990).
- Holt, Stephen D., "Effect of 1993 Budget Act on the Advance Payment Option of the Earned Income Credit," *Tax Notes*, Vol. 62, No. 6 (February 7, 1994): 759-763.

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<sup>10</sup> Some of these issues have, very recently, been addressed and/or are being addressed in the form of formal executive and legislative proposals. For example, the U.S. Treasury has proposed EIC anti-fraud measures, targeted at self-employed taxpayers (see Westlaw, 1995 DTR 116 d11, June 16, 1995, and Westlaw, 1995 DTR 115 d38, June 15, 1995).

Also, Public Law 1047 (H.R. 831) places restrictions on EIC eligibility for post-1995 tax years. Taxpayers with "disqualified income" in excess of \$2,350 will no longer qualify for the EIC. Disqualified income includes taxable and tax-exempt interest, dividends, and net rent and royalty income.

- Kirchheimer, Barbara, "EITC Gets High Marks, But Flaws Need Correcting," *Tax Notes*, Vol. 61, No. 5 (November 1993): 521-523.
- KixMiller & Baar, *1925 United States Income and War Tax Guide*, Chicago, IL: Commerce Clearing House (1924).
- Lipman, Francine J. and Williamson, James E., "Recent Proposals to Redesign the EITC: A Reply to an Economist's Response," *Tax Notes*, Vol. 62, No. 9 (February 28, 1994): 1175-1180.
- McIntyre, Michael J., "Rosen's Marriage Tax Computations: What Do They Mean?", *National Tax Journal*, Vol. XLI, No. 2 (June 1988): 257-258.
- Moore, Robert L., "Recent Proposals To Redesign The EITC: An Economist's Response," *Tax Notes*, Vol. 60, No. 1 (July 1993): 105-108.
- O'Neil, Cherie J. and Nelsestuen, Linda B., "The Earned Income Credit: The Need for a Wealth Restriction for Eligibility Determination," *Tax Notes*, Vol. 63, No. 9 (May 1994): 1189-1201.
- Pechman, Joseph A., *Federal Tax Policy*, Fifth Edition, Washington, D.C.: The Brookings Institution (1987).
- Polinsky, Alexander, "Tax Bill's Stiff Wedlock Penalty Tests Limits of 'Family Values'," *Tax Notes*, Vol. 60, No. 1 (July 5, 1993): 11-12.
- Report by the Auditor General of California, *The Department Of Social Services Does Not Use Information From Its Audits To Adjust Rates For Group Homes That Receive Funds From The Aid To Families With Dependent Children - Foster Care Program*, P-540, Sacramento, CA (August 1986).
- Rosen, Harvey S., "Thinking About the Tax Consequences of Marriage," *National Tax Journal*, Vol. XLI, No. 2 (June 1988): 259-260.
- , "The Marriage Tax Is Down But Not Out," *National Tax Journal*, Vol. XL, No. 4 (December 1987): 567-575.
- Scholz, John K., "The Earned Income Tax Credit: Participation, Compliance, and Antipoverty Effectiveness," *National Tax Journal*, Vol. XLVII, No. 1 (March 1994): 63-87.
- Sommerfeld, Ray M., Madeo, Silvia A., Anderson, Kenneth E., and Jackson, Betty R., *Concepts of Taxation*, 1994 Edition, Orlando, FL: Harcourt Brace & Company (1993).
- Statistics of Income (SOI) for 1931 and 1975 through 1991* (1933 & 1977-1993, respectively). United States Treasury Department, Bureau of the Internal Revenue (Washington, D.C.): 1933 & 1977-1993, respectively.
- Statistics of Income (SOI) 1989 Public Use Sample*, United States Treasury Department, Bureau of the Internal Revenue (Washington, D.C.): 1992.
- Steuerle, Gene, "Economic Perspective: Measuring the Impact of Job Subsidies: Is There a Double Standard?" *Tax Notes*, Vol. 61, No. 7 (November 15, 1993): 865-866.
- Yin, George K. and Forman, Jonathan B., "Redesigning the Earned Income Tax Credit Program to Provide More Effective Assistance for the Working Poor," *Tax Notes*, Vol. 59, No. 7 (May 17, 1993): 951-960.
- Zarefsky, David, *President Johnson's War on Poverty*, University, Alabama: The University of Alabama Press (1986).

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## THE HISTORICAL CONTEXT OF PROFESSIONAL IDEOLOGY AND TENSION AND STRAIN IN THE ACCOUNTING PROFESSION

*Abstract:* A growing literature points to a crisis of confidence in the accounting profession and a lack of commitment by its members to the professional ideology. In this paper the approach developed by MacIntyre is used to place professional ideology in an historical context. The paper argues that the tension and strain in the profession can be related to the changing character of both the contemporary society and professional ideology itself. It concludes by highlighting the need for the profession to develop an ideology to which its members as well as society can relate.

**Keywords:** Professional Tension, Professional Ideology, Accounting Profession.

### INTRODUCTION

Professional activity has been the subject of public scrutiny in recent years as many professions have been criticised for their failure to live up to society's expectations which require them to play an important part in the smooth functioning of modern society. For example, Schon [1983, p. 4] states:

... not only have we witnessed well publicized scandals in which highly esteemed professionals have misused their autonomy — where doctors and lawyers for example have used their position illegitimately for private gain — but we also encounter visible failures of professional action.

The failures of professional action have resulted in a loss of society's confidence in many professions leading to a crisis situation. Symptoms of a crisis in the professions have been increasingly visible since the 1950s. Studies carried out on many professions have highlighted such symptoms. Eron [1955, pp.

559-66] found that medical students became more cynical about their profession as they progressed through professional education. Bloom [1963, pp. 81-83] and Harris [1964, pp. 95-107] indicated that many medical students entered the profession with the primary goal of making money and acquiring prestige rather than that of offering service. Millerson [1964, pp. 171-75] and Arthurs [1970, pp. 236-67] found a vast difference between the rates of ethical violations and the rates of prosecution in a wide variety of professions. More recently, the accounting profession has partly been blamed for the recent Savings and Loan Industry scandal in the United States because the auditors failed to report lax controls in lending operations, and to identify non-performing loans [Briloff, 1990, pp. 10-21]. In the United Kingdom the collapse of such companies as Polly Peck, Coloroll and Sound Diffusion which had received a 'true and fair' audit report prior to the collapse has placed new pressures on the profession. This has led to public calls for external regulation of professional activity [Mitchell et al, 1991, pp. 1-32], and appeals to the courts for recourse against professional incompetence which has caused a steady loss of professional autonomy.

A profession is like a community within a community [Goode, 1957, p. 195]. The inability of a profession to inculcate professional values and to discipline members for deviant behaviour indicates intra-community tension and strain (conflicts and resistance among members within a community) whereas the erosion of trust in a profession indicates inter-community tension and strain [conflicts between the professional communities and the larger community in which they exist]. Intra-community tension and strain within the accounting profession has been explained in relation to the practising environment of accountants [Montagna, 1974]. Zeff [1988, p. 21] also states "As far as I have been able to determine no accounting body anywhere in the world has expelled a member for flouting an approved accounting standard". Neu [1991, pp. 295-313] and Allen [1991, pp. 51-67] argue that formal prosecution under professional ethical codes serves mainly for public visibility because of the low rate of prosecution and lenient treatment. There is also evidence in the accounting literature that suggests the existence of inter-community tension and strain. Parker [1987, pp. 122-40] in an analysis of ethical pronouncements by the accounting profession in Australia, found a significant number of pronouncements focused upon protecting the profession rather than society. Armstrong [1987, pp. 27-45] found that ac-

countants scored lower on a test of moral maturity than means published in the psychology literature for others with comparable educational levels. The lack of confidence in the services provided by accountants is also an indication of inter-community tension and strain.

Professional activity over the years has been characterised by two features. On the one hand, the professions have continued to experience tension and strain, and on the other hand, they have continued to emphasise the necessity and universality of the traditional professional ideology, whilst modifying it sometimes [O'Leary and Boland, 1987, pp. 103-21]. Professional ideology with its associated ethical conduct through selflessness and trustworthiness has been highlighted in claiming professional autonomy. Shils [1968, p. 67] in his review of the concept and function of ideology states that "every ideology — however great the originality of its creators — arises in the midst of an ongoing culture". He further points out that "ideologies are responses to insufficient regard for some particular element in the dominant outlook and are attempts to place that neglected element in a more central position and to bring it into fulfilment" [p.67]. Accordingly, any ideology prevailing within a community cannot be fully understood in isolation of the conditions and ideas in society. This is highlighted in MacIntyre's work on the crisis faced by the Christian ideology [MacIntyre, 1971, pp. 12-26] and ethics [MacIntyre, 1984], where he contrasts the historical and social sources of current ideology with contemporary social conditions to show the vacuous nature of the ideology. MacIntyre [1971, pp. 5-11] argues that the tendency to confer necessity and universality on ideology whilst experiencing a high level of tension and strain is due to lack of attention paid to its historical and social sources. Commenting on the appearance of Christian ideology in contemporary society, MacIntyre [1971, p. 7] states:

... it is important to stress that it is not just the character of Christianity or just the character of contemporary society, but rather the coincidence of certain features of these two changing characters that has rendered Christianity ideologically vacuous. The attempt to maintain the values and the credibility of Christianity in the intellectual and moral climate of, for example, contemporary Britain has led to a vacuity.

MacIntyre [1984, pp. 30-55] in a comprehensive critique of eighteenth and nineteenth century philosophers' [e.g., Hume,



Kant and Smith] efforts to derive an ethical doctrine through reasoning from premises concerning human nature, highlights,

an ineradicable discrepancy between their shared conception of moral rules and precepts on the one hand and what was shared despite much larger divergences — in their conception of human nature on the other. Both conceptions have a history and their relationship can only be made intelligible in the light of that history [MacIntyre, 1984, p. 52].

The conception of moral rules and precepts of eighteenth and nineteenth century philosophers was based on their christian past which was formulated from a “comprehension of man’s true end” and the conception of human nature was based on “man-as-he-happens-to-be” [MacIntyre, 1984, pp. 53-54].

MacIntyre’s [1984] ideas have been used to explain accounting phenomena [e.g. Francis, 1990 and Nelson, 1993]. Francis [1990, pp. 4-17] laments the dominance of external rewards and the decline of virtues in accounting practice. Nelson [1993, pp. 207-29] argues that accounting in modern times has been reduced to representation and control, which could lead to the degeneration of accounting into a mere technology.

The paper proposes to analyze the tension and strain experienced by the accounting profession. Adopting MacIntyre’s approach which highlights the importance of historical and social sources in understanding any ideology prevailing within a community, the paper takes the view that this phenomenon is related to problems associated with traditional professional ideology which is characterized by “public interest”. Whilst MacIntyre’s views are applicable to other aspects of accounting and the accounting profession [see for example Francis, 1990, and Nelson, 1993], they have been integrated into the discussion only to the extent necessary to achieve the purpose of this paper. The paper identifies the factors that contributed to the development of the traditional professional ideology in an attempt to explain how the changing character of the profession in conjunction with changing character of society has contributed to tension and strain in the accounting profession.<sup>1</sup> The paper argues that the coincidence of the changing features of both the accounting profession and contemporary society has rendered

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<sup>1</sup> The importance of studying accounting thought or in this case professional ideology in the historical, social and institutional contexts has also been emphasised by Previts et al (1990) in what they term interpretive historiography.

the traditional professional ideology irrelevant to a considerable extent, a condition that was not present in the formative years of the profession.

The rest of the paper is organized into four sections. The first section consists of a brief discussion on professional ideology, the feudal environment in which the concept of professional ideology emerged and the influence of the church in its development. The second section considers the changing social and political environment, and the resulting secularization of the modern professions and modifications introduced to the professional ideology in later years. The third section analyses the development of tension and strain within the professions, and uses the analysis to explain the situation that exists in the accounting profession at the present time leading to some concluding remarks in the final section.

### THE HISTORICAL CONTEXT OF PROFESSIONAL IDEOLOGY

The concept of ideology has been defined in the literature in a number of different ways. It has been used in reference to "ideas", "beliefs", "doctrines", "theories", "values" and "myths" [Carlsnaes, 1981, pp. 1-5]. The Concise Oxford Dictionary defines it as "manner of thinking characteristic of a class or individual, ideas at the basis of some economic or political theory". In more recent times professional ideology has been referred to in the sense highlighted by Marx [Johnson, 1972; Larson, 1977, p. xviii]. Marx used the term for "distorted or selected ideas in defense of the status quo" [Cited in Johnson, 1968, p. 76.].

In this paper, the term professional ideology refers to the ideas underlying what a profession is, as identified by sociologists working within the trait and functionalist approaches [e.g. Greenwood, 1957, pp. 45-55; Millerson, 1964, p. 5; Barber, 1963, p. 672; Goode, 1960, pp. 902-14; Parsons, 1949, pp. 34-49]. These ideas include "public interest", "rationality" in the development of a body of knowledge, "universalism" in application, "functional specificity" and "autonomy" in practice.

#### *The feudal environment*

Carr-Saunders and Wilson [1933, p. 289] trace the beginning of professions to the eleventh century during which the great movement towards association began to sweep like a wave over the cities of Europe. Whilst the guilds exhibited certain

characteristics of professions, e.g., division of labour, there is evidence to suggest that the ideology exhibited by the professions today originated in the church [Carr-Saunders and Wilson, 1933, p. 290], with divinity as the earliest profession. The church had a significant influence on the development of the concepts of "profession" and "professional ideology".

The eleventh century saw the maturity of the middle ages [also known as the feudal or medieval period]. The middle ages was the outcome of a violent and disorderly period: "Feudalism was born in the midst of an infinitely troubled epoch, and in some measure it was the child of those troubles themselves" [Bloch, 1961, p. 3]. The violence in Europe, a result of invasion from the south by Muslims, from the east by Hungarians and north by Scandinavians contributed to the collapse of the Roman Empire and the breakdown of control in many monarchies. Land and people were divided and controlled by manorial lords and barons. The insecurity was due not only to external aggression but also to internal unrest partly caused by economic conditions, customary law, and manners of the time. As Bloch [1961, p. 411] explains,

... at a time when trade was scarce and difficult, what surer means of becoming rich than plunder or oppression ... the principle of customary law in the long run resulted in the legalization of almost every usurpation, and the firmly rooted tradition which recognised the right, or even made it the duty, of the individual or the small group to execute justice on its own account.

The concepts cherished in society were aimed at bringing about social order. The duty of the individuals in medieval society was to live according to their station and to perform their traditional tasks. This is indicative of the concept of freedom that existed in feudal society. The Christian view was that all people by sin have lost the dignity of freedom and have made themselves, in varying degrees, slaves of their passions; the way to freedom then lies through a new subjection, the humiliation of self negation [Southern, 1953, p. 101]. This view is reflected in a letter written by St. Anselm, one of the most influential medieval philosophers, to a monk who proposed to make a journey to his native land in order to save his sister from a state of serfdom:

What concern is it of monks — men who have resolved to flee the world — what does it matter to them, who serves whom in the world, or under what name? Is not

every man born to labour as a bird to flight? Does not almost every man serve under the name of lord or serf? [quoted in Southern, 1953, p. 102]

Southern [1953, p. 107] also observed that when serfdom was feared or resented, it was not the subordination but its arbitrariness that caused concern. In medieval society the emphasis was on obligations and dependence, not on rights. Bloch [1961, p. 145] explains:

To be the "man" of another man: in the vocabulary of feudalism, no combination of words was more widely used or more comprehensive in meaning. In both Romanic and Germanic tongues it was used to express personal dependence per se and applied to persons of all social classes regardless of the precise legal nature of the bond . . . the emphasis was on the fundamental element in common, the subordination of one individual to another.

This concept also extended to the family, Powers [1924, pp. 104-36] writes of the book, the *Menagier de Paris* wrote, which was meant to provide instructions for his young wife on her duties. She also writes of the obligations of the peasant Bodo to his master. The ties of blood relationship were also very strong during the period as pointed out by Bloch [1961, p. 124]: "The general assumption seems to have been that there was no real friendship save between persons united by blood". These ties also extended to economics, because even though individual possession was recognised the main emphasis was on community goods.

In summary the middle ages with its feudalism was an outcome of a violent and unstable period leading to a society in which the concept of rights was non-existent, and a society which was willing to give anything for stability. It was also an unequal society but not an hierarchical one because there was too much uncertainty to develop a stable social classification. It was a society which had far-reaching restrictions on social intercourse to bring about social order.

The manorial lords did not have consistent laws nor did they make great attempts to maintain order. Due to these conditions the medieval person's passionate desire was for unity and certainty. Coulton [1946, p. 21] states, "... the mainspring of power was men's passionate desire after unity; after any escape from mere anarchy". Under these circumstances, he argues, the well organized and bureaucratic church was able to provide the

stability that no other institution was able to provide [Coulton, 1946, p. 125]. The church also had a better image, for example, "The watchwords of the state were oppression, coercion and persecution, the maxims of the church were love, compassion and consolation" [Rostozef quoted in Coulton, 1946, p. 15]. The church took on the responsibility for education and poor relief. Although the church imposed on society the same rigid and undemocratic structure that it practised itself people were content because of its contribution towards establishing a sense of stability.

The arbitration of the Pope in many conflicts further enhanced his stature, and the stability he provided enabled the flourishing of philosophy, arts and education within the church. The growth of these disciplines in turn raised the profile of the church. Coulton [1946, p. 18] argues the church was one of the constructive things which emerged from the welter of anarchy.

### *The Church and Professional Ideology*

Most of the valued attributes of a profession, e.g., a body of knowledge, a set of values based on the concept of a "calling" in public service, a code of ethics, education and training were developed by the clergy in a feudal environment. The church had a theoretical body of knowledge which was based on the Bible. The concept of knowledge and means of acquiring knowledge in medieval times can be summed up by the Latin phrase 'Credo ut intelligam' — "I believe in order to understand" [quoted in Copleston, 1961, p. 11]. This can be related to the Christian belief that not only people search for wisdom, but wisdom also searches for people [Fremantle, 1954, pp. 48-51]. St. Augustine, an eminent medieval philosopher, argued that necessary and immutable truths depend on the eternal ground, namely God. He also argued that this truth was perceived by people through 'divine illumination'.

The argument that truth was perceived by people through 'divine illumination' provided the church with a monopoly over knowledge. All intellectual disciplines during this period were adjuncts of theology, "the queen of the sciences" [Ergang, 1967, p. 14]. Medieval intellectuals were mainly concerned with the relationship of reason to faith and vice versa, the relation of God to the world, and the nature of human beings and immortality.

The church's code of ethics was based on the Bible. The Christian claim was that this code of ethics was derived from a

doctrine of "natural law" [Barclay, 1978, pp. 125-26]. It was claimed that Christian ethics was firstly "natural" to man [or corresponds to man's true nature], and secondly it can be shown to be so by a process of natural reason. Later on the doctrine of "natural law" was replaced by creation ethics in justifying Christian ethics. "Creation ethics starts with God and his will for living in his creation" [Barclay, 1978, p. 129]. It is asserted that to break these commandments is to offend against a created order [Barclay, 1978, pp. 129-33]. This assertion reflects on Coulton's [1946, p. 21] earlier point that the major deficiency in medieval society was order. Further evidence suggesting the influence of the lack of order within the community at the time on the development of Christian ethics is also provided by Meeks [1986].

The concept of public interest or altruistic service motive also developed in a feudal environment, an environment in which obligation was emphasized, independence was unknown and justice was arbitrary. The church had a very clear concept of what was in public interest (even if some might feel that it is a misplaced belief), that is saving "man" from "his" sins. Berlant [1975, pp. 25-42] argues that there is always a certain degree of imperfect internalization of morals by professionals and this could lead to misplaced trust. In a relationship of dependence and trust there is always an opportunity for exploitation, but in a society based on obligation, dependence and arbitrary justice, public interest and ethics became a very important form of regulation, social control and protection for the common person, in the absence of external control. The client or public had no recourse to justice when exploited by the clergy other than to complain to the clergy since "Papal policy was so consistent, in comparison with that of the lay rulers, that the balance tended more and more in favour of the church" [Coulton, 1946, p. 125]. The greatest crime was heresy or infidelity to the church. In many cases the church also assumed the task of enforcing the laws [Ergang, 1967, p. 13]. Furthermore, the church encouraged the strongly personal type of social relation and self-discipline rather than external control [Parsons, 1968, pp. 640-77].

In an environment where self-discipline was looked on with admiration and the church played the roles of executive, legislature and judiciary in society, professional autonomy or the autonomy of the church was not questioned. The church had an elaborate mechanism to ensure that its members worked in public interest. Training was rigorous and long, in which negation

of self interest was an important part. The church also put in place various other controls as elaborated by Powers [1924, p. 76]:

In the middle ages the nunneries of England and a great many of the monasteries, used to be visited at intervals by the Bishop of their diocese in order to see whether they were behaving properly. It was rather like the periodical visitation of a school by one of His Majesty's inspectors, only what happened was very different. When His Majesty's inspector comes he does not sit in state in the hall, and call all of the inmates in front of him one after another, from the headmistress to the smallest child in the first form, and invite them to say in what way they think the school is not being properly run, and what complaints they have to make against their mistress and which girl habitually breaks the rules — all breathed softly and privately into his ear, with no one to overhear them. But when a Bishop came to visit a nunnery, that is precisely what happened.

The church made a great effort to ensure that priests received proper education and training. The importance of education was recognised by the medieval church leaders. For example, Archbishop Pecham in 1287 issued a statute in council which begins:

The ignorance of priest casteth the people into the ditch of error; and the folly or the unlearning of the clergy, who come bidden to instruct the faithful in the catholic faith, doth sometimes tend rather to error than sound doctrine" [Quoted in Coulton, 1946, p. 145].

The concern for education greatly raised the stature and influence of the church because the nobility sent their children to the church for education. Rashdall [1895, p. 697] states,

Nearly all the civil servants of the Crown, the diplomatists, the secretaries or advisers of the great nobles, the physicians, the architects, at one time the secular lawyers, all through the Middle Ages the then large tribe of ecclesiastical lawyers, were ecclesiastics ... the average student at Oxford or Paris — however little he might be looking forward to priestly duties as the real work of his life — generally contemplated holy orders as his eventual destination.

The monopoly over knowledge and education by the church is also reflected in the development of accounting as evidenced by the earliest systematic exposition of the double entry system which was produced by a monk [Luca Pacioli]. The clergy acted as both "interpreters of the ideas of the great and as the depositories of political traditions" [Bloch, 1961, p. 80]. In fact the whole area of education was exclusively under the control of the church until the mid 17th century [Coulton, 1946, pp. 385-411].

### SECULARIZATION OF THE PROFESSIONS AND THE EMERGENCE OF ACCOUNTING AS A PROFESSION

The greatest contribution of the church to the middle ages also led to the demise of its influence. The social order and stability the church contributed to, enabled the flourishing of commerce and industry as well as the development of a secular spirit in society. Dirks [1954, p. 169] describes the situation as follows:

Despite the many centuries that the generation of men had professed the faith, despite the length of time their 'religion' in the narrower sense had been Christian and Catholic, their thinking and their everyday actions were beginning to become emancipated.

The middle class gave expression to the growing secularist spirit by trying to extract more pleasure and greater enjoyment from "this" life [Ergang, 1967, p. 32-34]. The rising merchant and banking class asserted their desire to divorce the sphere of economic affairs from religious life, to be governed by its own principles usually based on Roman law. This class also allied with rulers of national states in their struggle with feudal barons and later with the church.

The secular spirit also asserted itself in intellectual circles. Doubts about the unity of ethics and knowledge were raised. William of Ockham reversed the traditional method of inquiry [followed by St. Augustine to St. Thomas Aquinas] from asking how the individual derives from a universal nature, to explain how in a universe of individuals the intellect comes to conceptions that are not individual. For Ockham, knowledge of existence alone constituted evident knowledge and since all existence was individual, individual existence was the source of all proper knowledge. This assertion of Ockham did not only have great implication for the development of knowledge but also social



structure. Ockham however made all attempts to retain God in his scheme of philosophy when he says,

God can do some things by his ordained power and some by his absolute power. This distinction is not to be taken to mean that there are really two powers in god, because god's power is the same in God as outside him [quoted in Leff, 1976, p. 33].

The secular spirit demolished the traditional concept of obligation and freedom. For example, Hobbes in the *Leviathan* [1985, pp. 190-91] pointed out that freedom is the right to any course of action to satisfy one's desires. Hobbes argued that reason is essentially a servant of the passions, and is the faculty of devising ways and means to secure what one desires. He felt that people introduced restraints upon themselves to prevent the miserable condition of perpetual war in a commonwealth, and they were only obliged to follow those laws. Philosophers following Ockham also sought to separate ethics from the Bible and base it on some conception of human nature (Hobbes and Spinoza) or feelings (Hume) or sympathy (Smith) [Feldman, 1978].

The secular spirit also led to the reintroduction of Greek science into the west. The works of Aristotle stimulated a wider interest in the natural sciences. The popular reception by intellectuals of the works of Copernicus and Vesalius, and the growth of nation states placed pressure on established professions, such as the medical and legal profession, to break away from the church. This was not an easy task, as pointed out by Underhill [1992, pp. 322-49], in the medical profession the elite physicians resisted it strongly while the general practitioners adopted it faster in their effort to gain greater status and prestige. The break-up of the medieval corporations and the increase of private wealth also meant that a professional could earn an income other than through the holding of the ecclesiastical benefice, and new professions based upon intellectual techniques developed along with the progress of science [Carr-Saunders and Wilson, 1933, pp. 294-97].

In the secularization process the medical and legal professions did not discard all their old values, instead they modified the old ideology and incorporated new ones. Larson [1977, p. 5] states:

The modern model of professions undoubtedly incorporates pre-industrial criteria of status and pre-industrial ideological orientations. Any concrete historical pro-

cess, such as the first phase of modern professionalization, inextricably binds together elements which analytically, pertain to different and even antithetic structural complexes . . . . Their product however was an innovation — if nothing else, because it reorganised and transferred into a new social world parts and patterns of the old.

The effort to retain the old ideology can be understood in the contexts of the intellectual climate of the time. Leading intellectuals of the time, e.g., Tawney, Durkheim and Peirce whilst in favour of secularization had a deep-felt revulsion against capitalist values and saw the old values in professional groups as an alternative to capitalist values [Haskell, 1984, p. 184].

The secularized professions sought to retain the traits, e.g., a code of ethics, knowledge base, education and working in public interest but made major changes to the contents of these traits. The knowledge base was built on methods of acquiring knowledge developed by the seventeenth century renaissance philosophers like Bacon and Descartes. Bacon advocated the empirical, experimental method to the search for knowledge. Bacon was concerned with inductive logic, that is the rules of generalization based on observation of particular things and events [Hampshire, 1956, 19-31]. Descartes advocated the deduction method of mathematics to the search for knowledge. Descartes argued that "outside mathematics, all claims to knowledge seem, when one pauses to reflect, uncertain, unsystematic and unsupported by any common method of proof" [Hampshire, 1956, p. 60]. The objective was to generate a valid theory that could provide a solid base for the development of professional techniques [Schein, 1972, pp. 43-48].

With secularization the professions also quickly allied themselves with the secular rulers of nation states and the middle class [Larson, 1977, p. 8]. The secular rulers in return for the support and taking into account their inability to police the professions allowed the professions to retain considerable autonomy which they enjoyed as part of the clergy. The medical and legal professions in particular retained a code of ethics based to a large extent on the old code but changed the justification for the code from that of the Bible to one based on human nature that was advocated by seventeenth and eighteenth century philosophers like Locke, Hume and Kant, who attempted to derive an ethical doctrine through reasoning from premises concerning human nature.

Ethical doctrines arrived at through this mode have however been found to be wanting as highlighted in the introduction. According to MacIntyre, the failure of the eighteenth and nineteenth century philosophers has resulted in the popular emotivists view of moral utterances [see also Ayer, 1946], as well as the separation of fact from value. The separation of fact from value, MacIntyre [1990, p. 216] argues, has contributed to intellectual enquiry becoming "fragmented into a series of independent, specialized, and professional activities whose results could, so it seemed, find no place as parts in any whole". In the course of secularization the professions also underwent a process of liberalization [Argyris and Schon, 1974, p. 147] and the organizational structure was made more democratic compared to that of the church. They became open to a wider range of participants. The authority of organizational leaders were curtailed, a major deviation from the unquestionable authority of the Pope.

The industrial revolution saw the rise of technique, a development that was accompanied by an emphasis on specialization and a proliferation of discrete bodies of professional expertise. The secularization and the rise of technique changed the view of the professional from one who professed a faith to a practitioner of technique who did not admit the need for faith [Argyris and Schon, 1974]. During the industrial revolution with its prominence given to industry and commerce, accounting became essential for the smooth functioning of society which was increasingly becoming business oriented.

The industrial revolution also supported the rise of the accounting occupation's characteristic strategy for controlling labour, raising the accountants status within the organization [Armstrong, 1985, pp. 129-148; 1987, pp. 27-45]. The involvement of accountants in the management and liquidation of bankruptcies also brought the accounting occupation in close contact with the legal profession providing an extra support for the claim to professional status [Brown, 1905; Kedsle, 1990, p. 1-19]. Although some form of accounting existed long before the industrial revolution [Chatfield, 1974], the renewed importance accorded to it during this period provided accountants with the opportunity to claim professional status by emulating the characteristics of the established professions at the time.

The environment in which accounting emerged as a profession already had well established attributes such as professional

autonomy and public interest which were considered essential in any professional activity.

### THE TENSION AND STRAIN

Professional autonomy which is an essential characteristic of the concept of professional ideology is based on three claims. First, the work of professionals entails such a high degree of skill and knowledge that only the fellow professionals can make accurate assessment of professional performance. Second, professionals are characterized by a high degree of selflessness and responsibility, that they can be trusted to work conscientiously. Third, in the rare instance in which individual professionals do not perform with sufficient skill or conscientiousness, their colleagues may be trusted to undertake the proper regulatory action [Freidson and Rhea, 1965, p. 107-24].

From an historical point of view the environment in which professions operate has undergone rapid change over the years. While it is debatable whether the priest required a high degree of skill and knowledge to perform his duties, there is little doubt that others were unable to assess the skill and knowledge of the priest because the church had a monopoly over education and knowledge. By contrast, although the modern professions also generally exhibit a high degree of knowledge and skill, there are institutions external to the professions with the ability to assess professional performance. In the case of the accounting profession these institutions include the courts, governmental agencies such as the Securities Exchange Commission [SEC] in the United States and similar institutions in other countries, and academics. The pluralization of the accounting standard setting process is an example of the ability of people outside the profession to define and assess professional performance. For example, in the United States, United Kingdom and Australia the standard setting and enforcement bodies include members who are not accountants.

Furthermore, in addition to the general comments made at the beginning of this paper, there are also questions about the knowledge base of the accounting profession. Hines [1989, pp. 72-92] points out that an apparent absence of a formal body of accounting knowledge has been a threat to the accountants' professionalization quest. She further argues that accounting knowledge is a residual of a political process, and is reflected in the arbitrariness of accounting standards, as well as the expansion and diversification of accounting work. In recent times

even the courts have commented on the quality standards of the profession [Lochner, 1992, p. 105-108].

Since the medieval period there has also been no universal agreement on the meaning or measure of "public interest" [Held, 1970]. The problem of defining public interest afflicts many professions, e.g., the legal profession [Moore, 1991, pp. 763-91]. The absence of any consensus has prompted many commentators [for instance Schubert, 1960] to describe it as slippery, value laden and vacuous, and to call for its rejection as an analytic concept. Dahl and Lindblom [1963, p. 501] argue that "often a precise examination would show that it can mean nothing more than whatever happens to be the speaker's own views as to a desirable public policy. In many professions initially this did not cause much concern because their services were viewed as "objective and value-free" [Morgan, 1988, p. 47]. This however is not the universal image of professionals at the present time, for example, accountants are seen to play a partisan role [Tinker, 1991] in society.

The church in medieval times played the roles of executive, legislature and judiciary in society, which in present times would be considered as "conflict of interest". There was no question of other institutions in society regulating the church since it was a power unto itself. After secularization and until the twentieth century the state in general was not interested in active regulation of social and economic life [Philips, 1965]. However, the situation changed in the twentieth century. When many other aspects of economic and social life are regulated by the state [Hurst, 1950] it seems difficult to argue that the professions should be treated differently. Hobbes' [1985] assertion that reason is a servant of the passions has exposed weaknesses of self-discipline as a form of regulation and social control, and led to the development of sophisticated forms of transparent, institutional controls. Ritti et al [1974] found that even the modern church has problems inculcating new recruits with its traditional belief system, and lawyers cannot relate the ideal basic product of the legal system, that is the dispensation of justice, to the far from even-handed judicial system. Previously decisions on the choice of accounting policy were left to the accountant and regulation was through peer pressure. Today as in many other areas of economic activity, regulation is by transparent institutions external to the profession like the Financial Accounting Standards Board (FASB) and the Securities Exchange Commission (SEC).

The accounting profession like the medieval church plays a host of conflicting roles, it sets the objectives of financial reporting and auditing, it develops the means to achieving the objectives, it sets the quality standards and enforces them, it also represents the interests of its members, leading a Council member of the Institute of Chartered Accountants in England and Wales (ICAEW) to question if the role of the ICAEW was that of a regulator or trade union [Bruce, 1993, p. 31]. The disappearance of medieval social and institutional conditions has made the apparent conflict of interest among the many roles played by the accounting profession very visible. The conflict of interest among the many roles played by the profession, the absence of a universal concept of public interest, separation of knowledge and ethics, and the downgrading of self-discipline as a form of social control has contributed to the development of inter and intra community tension in the accounting profession.

The problematic nature of professional ideology and its impact on the professions is evident in the current literature. The traditional view of professions as "corporate guilds that protected civic morality and social solidarity from the corrosion of modern egotism" [Metzger, 1987, p. 10] has been replaced by that of a monopolist exploiting the public for a private gain [Schon, 1987, p. 4]. Roth [1974, pp. 6-23] argues that sociologists studying the attributes of a profession are decoyed into becoming apologists for the professionalism ideology. The study of accounting profession has also shifted from those using a taxonomic approach [Carey, 1969; Buckley & Buckley, 1974] to that of identifying the struggle for professional dominance [Willmott, 1986, pp. 555-80; Walker, 1991, pp. 257-83], and struggles for territory among professions [Armstrong, 1985; 1987].

## CONCLUSION

Following MacIntyre's ideas, this paper attempts to explain the tension and strain in the accounting profession in terms of the changing character of professional ideology and society. Much of the ideology associated with professions has a long history. Whilst the social and institutional conditions have changed the professions have maintained the view that the ideology is universal and essential for the continued growth and development of the profession. For accountants working in contemporary conditions that stress competition, the professional ideology with concepts of public interest seems empty and

meaningless. The mismatch between the changing social and institutional conditions and the continued emphasis on professional ideology would seem to create tension and strain within many professions including accounting.

Although there have been signs of tension and strain in the accounting profession for a long time, the situation seems to have reached a crisis point only recently [Belkaoui, 1991; Zeff, 1987]. As Leff [1976] points out, due to inertia, people seem to continue with the same attitudes "often long after they have become intellectually untenable or practically inconsistent" [p. 147]. For many professionals the professional ideology or the fundamental belief system in their own profession has become implausible [Ritti et al, 1974] and this has led some to adopt a cynical attitude towards the belief system and others to criticise the belief system.

The profession's continued attempts to maintain the current ideology with its conventional attributes would lead to increased tension and strain. The analysis in this paper suggests that it is important for a modern profession to develop an ideology to which its members as well as society can relate to. Increased knowledge of the social and institutional conditions which contributed to the development of the present professional ideology is likely to help the profession in its efforts to cope with the tension and strain it faces in a constructive manner.

#### REFERENCES

- Allen, K., "In Pursuit of Professional Dominance: Australian Accounting 1953-1985," *Accounting, Auditing and Accountability*, V4 (1991): 51-67.
- Argyris, C. and Schon, D.A., *Theory in Practice*, San Francisco: Jossey-Bass (1974).
- Armstrong, M.B., "Moral Development and Accounting Education," *Journal of Accounting Education*, V5 (1987):27-45.
- Armstrong, P., "Changing Management Control Strategies: The Role of Competition between Accountancy and Other Organisational Professions", *Accounting, Organizations and Society*, V10 (1985): 129-148.
- Armstrong, P., "The Rise of Accounting Controls in British Capitalist Enterprises", *Accounting, Organizations and Society*, V12 (1987): 415-436.
- Arthurs, S., "Discipline in the Legal Profession in Ontario," *Osgoode Hall Law Journal* (1970):236-269.
- Ayer, A.J., *Language, Truth and Logic*, London: Penguin (1946).
- Barber, B., "Some Problems in the Sociology of the Professions," *Daedalus* (1963): 669-88.
- Barclay, O., "The Nature of Christian Morality," in Kaye, B. & Wenham, G. (ed). *Law, Morality and the Bible*, Illinois: Intervarsity Press (1978).
- Belkaoui, A., *The Coming Crisis in Accounting*, Chicago: Quorum Books (1991).

- Berlant, J.L., *Profession and Monopoly: A Study of Medicine in the United States and Great Britain*, Berkeley, CA: University of California Press (1975).
- Bloom, S., "The process of becoming a physician," *Annals of the American Academy of Political and Social Science*, V346 (1963): 77-87.
- Bloch, M., *Feudal Society*, London: Routledge & Kegan Paul (1961).
- Briloff, A.J., "Accountancy and Society A Covenant Desecrated," *Critical Perspectives on Accounting*, V2 (1990): 5-30.
- Brown, R. (ed.), *A History of Accounting and Accountants*, T.C. and E.C. Jack, Edinburgh (1905).
- Bruce, R., "Are Professional Bodies Police or Trade Unions" London: *The Times*: 31 (Aug, 12, 1993).
- Buckley, J.W. and Buckley, M.H., *The Accounting Profession*, Los Angeles: Melville Publishing Co. (1974).
- Carey, J.L., *The Rise of the Accounting Profession: From Technician to Professional (1896-1936)*, New York: AICPA (1969).
- Carr-Saunders, E.M. & Wilson, P. A., *The Professions*, Cambridge: Clarendon Press (1936).
- Carlsnaes, W., *The Concept of Ideology and Political Analysis*, Connecticut: Greenwood Press (1981).
- Chatfield, M., *A History of Accounting Thought*, New York: Robert E. Kreiger.
- Copleston, F.C., *Medieval Philosophy*, London: Methuen (1952).
- Coulton, G.G., *Medieval Panorama*, Cambridge: Cambridge University Press (1946).
- Dirks, W., *The Monk and the World*, Methuen: London (1954).
- Ergang, R., *The Renaissance*, New York NY: D.Van Nostrand (1967).
- Eron, L., "Effects of medical education on medical students attitudes," *Journal of Medical Education* (1955): 559-566.
- Feldman, F., *Introductory Ethics*, New York: Prentice Hall (1978).
- Francis, J.R., "After Virtue? Accounting as a Moral and Discursive Practice," *Accounting, Auditing and Accountability Journal*, V3 (1990): 4-17.
- Freemantle, A., *The Age of Belief*, New York, NY: Mentor (1954).
- Freidson, E. & Rhea, B., "Knowledge and Judgement in Professional Evaluations," *Administrative Science Quarterly* (1965): 107-124.
- Goode, W.J., "Community Within a Community: The Professions", *American Sociological Review* (1957): 194-200.
- Goode, W.J., "Encroachment, Charlatanism, and the Emerging Profession" *American Sociological Review* (1960): 902-14.
- Greenwood, E., "Attributes of a Profession," *Social Work* (1957): 45-55.
- Hampshire, S., *The Age of Reason*, New York, NY: Mentor (1956).
- Harris, S., *The Economics of American Medicine*, New York, NY: Macmillan (1964).
- Haskell, T.L., "Professionalism versus Capitalism: R.H. Tawney, Emile Durkheim and C.S. Peirce on the Disinterestedness of Professional Communities," In Haskell, T.L. (ed.), *The Authority of Experts: Studies in History and Theory*, Bloomington: University of Indiana Press (1984):180-223.
- Held, D., *Public Interest and Individual Interest*, New York, NY: Basic Books (1970).
- Hines, R.D., "Financial Accounting Knowledge, Conceptual Framework Projects and the Social Construction of the Accounting Profession", *Accounting, Auditing and Accountability*, V2 (1989): 72-92.
- Hobbes, T., *Leviathan*, London: Pelican (1985).



- Hurst, J.W., *The Growth of American Law: The Law Makers*, Boston: Little Brown (1950).
- Johnson, T.J., *Professions and Power*, London: Macmillan (1972).
- Johnson, H.M., "Ideology and the Social System," in Sills, D.L. (ed). *International Encyclopedia of the Social Sciences*, MacMillan: New York (1968).
- Kedslie, M.J.M., "Mutual Self Interest — A Unifying Force; The Dominance of Societal Clout over Social Background in the Early Professional Accounting Bodies", *The Accounting Historians Journal*, V17 (1990):1-19.
- Larson, M.S. *The Rise of Professionalism: A Sociological Analysis*, Berkeley, CA: University of California Press (1977).
- Leff, G., *The Dissolution of the Medieval Outlook*, New York, NY: New York University Press (1976).
- Lochner, P. R., "Black Days for Accounting Firms" *Journal of Accountancy* (August, 1992): 105-8.
- MacIntyre, A., *Against the Self-Images of the Age*, London: Duckworth (1971).
- MacIntyre, A., *After Virtue*, Notre Dame, Indiana: University of Notre Dame Press (1984).
- MacIntyre, A., *Three Rival Versions of Moral Inquiry*, London: Gerald Duckworth & Co (1990).
- Meeks, W.A., *The Moral World of the First Christians*, Philadelphia: The Westminster Press (1986).
- Metzger, W.P. , "A Spectre is Haunting American Scholars: The Spectre of Professionalism", *Educational Researcher* (Aug-Sept, 1987): 10.
- Millerson, G., *The Qualifying Associations*, London: Routledge & Kegan Paul (1964).
- Mitchell, A., Puxty, A., Sikka, P. & Willmott, H., *Accounting for Change: Proposals for Reform of Audit and Accounting*, Discussion Paper No.7, London: Fabian Society (1991).
- Montagna, P.D., *Certified Public Accounting: A Sociological View of a Profession in Change*, Houston: Scholars Book (1974).
- Morgan, G., "Accounting as Reality Construction: A New Epistemology for Accounting Practice," *Accounting, Organisation and Society*, V13 (1988): 477-85.
- Moore, D.C., "Accounting on Trial: The Critical Legal Studies Movement and its Lessons for Radical Accounting", *Accounting, Organisation and Society*, V16 (1991): 763-791.
- Nelson, J.S., "Account and Acknowledge, or Represent and Control? On Post-Modern Politics and Economics of Collective Responsibility", *Accounting, Organizations and Society*, V18 (1993): 207-229.
- Neu, D., "Trust, Impression Management and the Public Accounting Profession," *Critical Perspectives on Accounting*, V3 (1991): 295-313.
- O'Leary, T., Boland, R.J., "Self-Regulation, Public Interest and the Accounting profession", *Research in Accounting Regulation*, V1 (1987): 103-121.
- Parker, L.D., "An Historical Analysis of Ethical Pronouncements and Debate in the Australian Accounting Profession", *ABACUS*, V23 (1987): 122-40.
- Parsons, T., *Essays in Sociological Theory*, New York, NY: Free Press (1949).
- Parsons, T., *The Structure of Social Action*, New York, NY: Free Press (1968).
- Phillips, C.F., *The Economics of Regulation: Theory and Practice in the Transportation and Public Utility Business*, Homewood: Richard D.Irwin (1965).
- Powers, E., *Medieval People*, New York, NY: Doubleday (1924).
- Previts, G.J., Parker, L.D. and Coffman, E.N., "An Accounting Historiography: Subject Matter and Methodology", *ABACUS*, V26 (1990): 136-155.

- Rashdall, H., *The Universities of Europe in the Middle Ages* (1895).
- Ritti, R.R., Ference, T.P. and Goldner, F.H., "Professions and their Plausibility," *Sociology of Work and Occupations* (1974): 24-51.
- Roth, J.A., "Professionalism: The Sociologist's Decoy", *Sociology of Work and Occupations* (1974): 6-23.
- Schein, E.H., *Professional Education: Some New Directions*, San Francisco, CA: McGraw-Hill (1972).
- Schon, D.A., *The Reflective Practitioner — How professionals Think in Action*, New York, NY: Basic Books (1983).
- Schubert, G., *The Public Interest*, Glencoe, NY: Free Press (1960).
- Shills, E., "The Concept and Function of Ideology," in Sills, D.L. (ed). *International Encyclopedia of the Social Sciences*, MacMillan: New York (1968).
- Southern, R.W., *The Making of the Middle Ages*, London: Hutchinson (1953).
- Tinker, T., "The Accountant as Partisan", *Accounting, Organisation and Society*, V16 (1951): 297-310.
- Underhill, P., "Alternative Views of Science in Intra-Professional Conflict: General Practitioners and the Medical and Surgical Elite 1815-58", *Journal of Historical Sociology* (1992): 322-349.
- Walker, S.P., "The Defence of Professional Monopoly: Scottish Chartered Accountants and "Satellites in the Accountancy Firmament (1854-1914)", *Accounting, Organizations and Society*, V16 (1991): 257-283.
- Willmott, H., "Organising the Profession: A Theoretical and Historical Examination of the Development of the Major Accountancy Bodies in the U.K.", *Accounting, Organizations and Society*, V11 (1986): 555-580.
- Zeff, S.A., "Does the CPA Belong to a Profession", *Accounting Horizon* (June, 1987): 65-68.
- Zeff, S.A., "Setting Accounting Standards: Some Lessons from the U.S. Experience", *The Accountant's Magazine* (January, 1988): 20-22.

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## A CITATIONAL ANALYSIS OF THE ACCOUNTING EDUCATION LITERATURE, 1956-1990

*Abstract:* Citations were collected for education articles published from 1956-1990. The journals selected for the study are *International Journal of Accounting Education and Research (IJAER)*, *Issues in Accounting Education (IAE)*, *Journal of Accountancy (JOA)*, *Journal of Accounting Education (JOAE)*, and *The Accounting Review (TAR)*. An analysis of the data has revealed: (1) the maximum average citation per paper peaked around 1981-82; (2) the 1976-1985 decade was the most productive in terms of the number of articles, average number of pages per article, and the average number of citations per paper; (3) *JOA* had the highest average citations per paper; (4) sixty-seven percent of the twelve most highly cited papers in accounting education were published in *TAR*; (5) accounting education scholars tend to cite very recent literature; (6) the immediacy index for the accounting education literature is approximately the same as that for agency theory literature; and (7) the content of education articles has changed from professional development, five year accounting programs, student testing and teaching aids to improving upon methodologies used to conduct education research and the ranking of accounting faculty and accounting concepts.

The objective of this study is to evaluate the historical development of the accounting education literature from 1956-1990. More specifically, we are concerned with employing citation analysis to determine the following : (1) the growth from 1956-1990, (2) the changes in the attributes of the papers themselves (length and number of citations) that characterize the development from short anecdotal papers to more lengthy research oriented works, (3) the influential researchers involved in the development of the accounting education literature and (4) how the structure of the literature has changed.

This study should aid accounting historians in their understanding and evaluation of the extent to which early accounting education research has contributed to current accounting education research. Accounting historians are also provided with an understanding of additional attributes of the accounting education literature, e.g., the length and number of papers, the average number of citations per paper, and those factors that cause a body of literature to move from a state of infancy to that of maturity.

The remainder of this paper reviews some related literature. Next, data collection is discussed, followed by an analysis and explanation of the results. The final section presents some concluding remarks.

## LITERATURE REVIEW

In an historical research context, citation and co-citation<sup>1</sup> analysis have been employed to identify attributes of specialized research areas in the accounting research literature. With regard to identifying attributes of specialized research areas, Gamble and O'Doherty [1985a] employed co-citation analysis to map the accounting income smoothing literature. In addition, Gamble, *et al.*, [1987] also examined the attributes of the agency theory literature to determine: (1) the most influential articles in the accounting agency literature, (2) the structure of the accounting agency literature and the dynamics of the change of such structure across time and (3) the growth attributes of both citations and papers over a twelve year time period (1972-1984). Bricker [1988] investigated knowledge preservation in accounting research via an examination of 428 published accounting articles and their citations. The study showed that accounting scholars tend to cite very recent literature. Thus, earlier accounting knowledge may become lost to future generations of accounting scholars. Finally, Bricker [1989] investigated the structure of accounting research by: (1) inferring a structure of accounting research by employing an extension of co-citation clustering (a

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<sup>1</sup> Co-citation analysis identifies the links between research studies across time by calculating the frequency with which a particular pair of papers has been jointly cited by a source document. By analyzing the set of papers that have common pair citations, which satisfy a minimum threshold level, lines of literature are described (by means of content analysis) and diagrammatically mapped via a citation diagram. For a complete description and application, the reader should refer to Small [1973].

derivative of co-citation analysis) and content analysis, (2) validating such structure by an independent statistical test (multiple discriminant analysis) and (3) examining the characteristics of such validated structure for evidence consistent with a fragmented and/or integrated accounting discipline. Bricker found that some accounting research areas, such as, positive accounting, market-based, and time-series, are relatively well integrated in the main structure of accounting research. On the other hand, other research areas, such as statistical auditing, tax, and studies of academic accounting are isolated from the main structure of accounting research.

Heck, *et al.*, [1990] used citations to analyze the authors and institutions to twenty-four leading academic journals from their inception through 1988. They found that there has been a substantial increase in the incidence of co-authorship and the number of articles published in recent years, and the relationship between size of a doctoral program and publishing frequency of the faculty of a Ph.D. program is lower than expected. Furthermore, when Heck, *et al.*, [1991] disaggregated their citation data they found that the most prolific (high frequency) contributors tend to publish in a variety of journals, and contemporary researchers are publishing in both newer and older journals. In a similar study, Heck and Bremser [1986] performed the following analysis on *The Accounting Review* articles published over a 60 year time period: identified the authors, their affiliation, and where they earned their doctoral degrees. Finally, Herring, *et al.*, [1989] documented and highlighted some of the aspects of the recent changes in accounting education and suggested some directions for future research and Lehman and Street [1989] used citation and content analysis of the 187 main section articles and teaching notes which appeared in the first six volumes of the *Journal of Accounting Education*. They found that the *Journal of Accounting Education* authors have researched a broad spectrum of topics using a variety of research methodologies.

## DATA COLLECTION

The major objective of our data collection efforts is to compile information on accounting education articles and their citations from 1956-1990. The 1956-1990 time period was selected because it provides a long enough time period to enable meaningful inferences to be drawn from the data. The journals selected for data collection are *International Journal of Accounting*

*Education and Research (IJAER)*, *Issues in Accounting Education (IAE)*, *Journal of Accountancy (JOA)*, *Journal of Accounting Education (JOAE)*, and *The Accounting Review (TAR)*.<sup>2</sup> These journals were selected because they represent the major academic accounting education research outlets for the 1956-1990 time period. Table 1 contains the number of articles and citations for the above journals during the 1956-1990 time period. One thousand three hundred and eighty-five articles were collected along with 1,184 citations (Appendix A contains a break-out of educational article contributions by journal for each year). *TAR* has the highest number of total articles and citations. The traditional accounting journals (*JOA* and *TAR*) average about one citation per paper while the newer, education oriented journals cluster together around an average of 0.65 citations per article.

**TABLE 1**  
**Articles and Citations**  
**1956-1990**

Journal and Dates of publication	Education Articles Published	Citations to Articles Published in Period	Average Citations Per Paper in Period
<i>JOA</i> 1956-1990	206	207	1.00
<i>TAR</i> 1956-1990	687	656	0.95
<i>IJAER</i> 1966-1990	57	39	0.68
<i>JOAE</i> 1983-1990	236	146	0.62
<i>IAE</i> 1983-1990	199	136	0.68
Total	1,385	1,184	0.86

### DATA ANALYSIS

Figure 1 shows that the average citations per paper peaked around 1981-82 and since that point has been a decreasing function with respect to time. It is plausible that the maximum average citation rate occurred around 1981-82 because of the citing

<sup>2</sup>The *Journal of Accounting Research (JAR)* was omitted from the list of journals investigated because it has not devoted a material amount of space to education articles and we are of the opinion that its inclusion would not contribute to our discussion of the development of the education literature. For example, from 1963-1972 *JAR* only published three education papers. Furthermore, an analysis of those papers revealed that they are not considered significant as far as the citing literature is concerned.

habits of authors publishing in the two new accounting education journals (*IAE* and *JOAE*) which were started in 1983. That is, perhaps authors publishing in those new education journals were citing works from other disciplines instead of the earlier accounting education literature because they were interested in transferring concepts, methods, etc., from those disciplines into the accounting education literature.<sup>3</sup> Figure 1 also reveals that 1976-1985 covers an interesting period of time for average citations per paper. That is, it covers: (1) the time period leading up to the highest average citation rate per paper, (2) the period of time in which the highest average citation rate per paper occurred and, (3) the period of time in which the average citation rate per paper began to drop. The drop in citations from 1976 to 1985 is partially due to the truncation of the study period that must ignore future citations. For the most part, the *JOA*, *TAR*, and *IJAER* published education articles for the entire period of study. The cumulative time-to-citation for these three journals is shown in the first cumulative total column in Table 3. These data also have a small down-ward bias but provide a preliminary basis for adjusting the observed citations for the truncated portion of the time-to-citation distribution. In 1979, for example, there are eleven years remaining in the study period. The cumulative total column for *JOA*, *TAR*, and *IJAER* (for 11 years to citation) in Table 3 shows that 98.57% of the citations will have been completed; hence, the time-adjusted average citations per paper for 1979 in Figure 1 are equal to 2.54 (the observed number (2.50) divided by 0.9857).

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<sup>3</sup> This point is further developed in the section entitled, "Textual Analysis of the Literature."

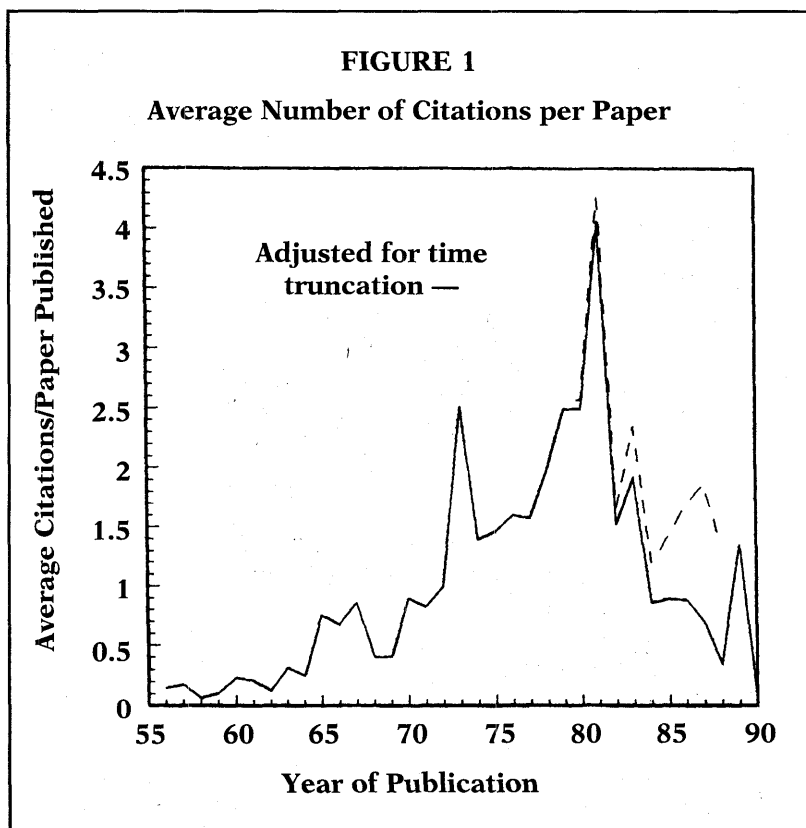


Table 2 provides some insights regarding citation incidence of individual and total journals from 1976-1985.<sup>4</sup> On an individual journal basis, *IJAER* has the highest percentage (70%) for articles that were never cited followed by *JOAE*, *JOA* and *IAE*. On an aggregate basis, however, roughly 50% of all papers selected to represent the above time period were never cited. Furthermore, in terms of one and two citations, *IAE* (42%), *TAR* (36%) and *JOAE* (35%) have the highest percentage of papers in those categories. In addition, 35% of all papers have one or two citations and only 15% have three or more. Finally, *TAR* has the largest percentage of papers cited followed by *IAE* and *JOA*.

<sup>4</sup>This time-period was selected because it marked the end of the anecdotal period and was far enough removed from the end of the study to allow significant citation occurrence.



**TABLE 2**  
**Citation Incidence of 306 Articles**  
**1976-1985**  
 (Table entries in %)

Citations per Article	<i>JOA</i>	<i>TAR</i>	<i>IJAER</i>	<i>JOAE</i>	<i>IAE</i>	Total
0	52.27%	44.65%	70.00%	56.52%	50.00%	49.67%
1	20.45	22.64	10.00	24.64	16.67	21.90
2	13.64	13.84	0.00	10.14	25.00	13.40
3	2.27	6.92	0.00	5.80	0.00	5.23
4+	11.36	11.95	20.00	2.90	8.33	9.80
Total Cits	44	159	10	69	24	306

Table 3 displays information regarding the age of papers when cited, for the 1976-1985 time period. On an aggregate basis, 31% of all papers cited were from zero (less than one year old) to two years of age; sixty-one percent were from zero to four years of age and; over 85% from zero to seven years of age. The aggregate citation-time distribution is biased toward shorter citation times due to the influence of the two journals that did not begin publication until 1983. The distribution of time-to-citation for the composite *JOA*, *TAR*, and *IJAER* differs from the composite *JOAE* and *IAE* data at a significance level less than 1% in a Chi-Square test.

On an individual journal basis, *IAE* had the highest (48%) and *TAR* the lowest (23%) percentage of papers from zero to two years of age when cited; *IAE* had the highest (87%), while *IJAER* and *TAR* the lowest (50%) percentage of papers from zero to four years of age when cited.

Thus far, our discussion has centered around the citation attributes (collectively and individually) during the 1976-1985 time period. This section of the paper focuses on the citation attributes for the entire 1956-1990 time period. However, for discussion purposes, the period under investigation (1956-1990) is decomposed into three decades and one five year time period.<sup>5</sup> Table 4 provides a summary of selected attributes by journal and time period. The lowest citation averages occurred during the 1956-1965 and 1986-1990 time periods, respectively. There

<sup>5</sup> Due to a 35-year period of investigation, the fourth time period only contains five years.

**TABLE 3**  
**Time-to-Citation Distributions**  
**Articles Cited during 1976-1985**  
**(Table entries in %)**

Years to Citation	JOA	TAR	IJAER	Sub- Total	Cum. Total	JOAE	IAE	Sub- Total	Cum. Total	Grand Cum.
0	20.00	5.56	0.00	7.38	7.38	5.83	1.61	4.24	4.24	6.5
1	6.67	7.60	5.56	7.38	14.76	14.56	16.13	15.15	19.39	16.07
2	16.67	10.23	16.67	11.43	26.19	20.39	30.65	24.24	43.64	31.11
3	8.33	11.99	16.67	11.67	37.86	22.33	25.81	23.64	67.27	46.15
4	16.67	14.62	11.11	14.76	52.62	17.48	12.90	15.76	83.03	61.20
5	8.33	11.11	0.00	10.24	62.86	10.68	6.45	9.09	92.12	71.11
6	1.67	11.40	5.56	9.76	72.62	5.83	3.23	4.85	96.97	79.49
7	3.33	10.53	11.11	9.52	82.14	2.91	3.23	3.03	100.00	87.18
8	10.00	9.36	11.11	9.52	91.67	0.00	0.00	0.00		94.12
9	1.67	3.51	11.11	3.57	95.24					96.58
10	1.67	1.46	11.11	1.90	97.14					97.98
11	0.00	1.75	0.00	1.43	98.57					98.97
12	1.67	0.29	0.00	0.48	99.05					99.32
13	3.33	0.58	0.00	0.95	100.00					100.00
14	0.00	0.00	0.00	0.00						
Total Cites	60	342	18	420		103	62	165		585

are several plausible reasons why the 1956-1965 decade produced a low citation rate—the size of the research subfield and the age of the papers. The larger the research subfield, the less chance a paper has of being cited, because larger subfields have more participants which means that they also have more literature to draw upon [Cole and Cole, 1974, p.34]. Thus, the low citation rate could be an indication of the fact that the accounting education research subfield was relatively large during the period of study. The age of the papers could have aided in the achievement of the low citation rate because perhaps the concepts, research methodologies etc., employed could have been around for such a long period of time that the researchers who initiated their use were no longer cited because their work has become common knowledge; thus, a reduction and/or lack of citations occurred. It is possible that a portion of the low citation rate for the 1986-1990 time period was caused by its proximity to the end of the selected time period.

*TAR* had the highest average citations per paper for every time period except for the 1966-1975 decade (*JOA* was number one). In terms of the time periods in which the two new accounting education journals (*JOAE* and *IAE*) are included, *IAE* was fourth and *JOAE* was last in average citations per paper for the 1976-1985 decade. However, for the 1986-1990 time period, *IAE* was second and *JOAE* was third in average citations per paper. Finally, on an overall basis, *JOA* has the highest average citations per paper followed by *TAR*; *JOAE* has the lowest average citation rate per paper. The average number of pages per article was at its lowest point during 1956-1965 and its highest point during the 1986-1990 time period. The low average number of pages per article during the 1956-1965 time period was influenced by the length of papers published in *TAR* and *JOA*, many of which were anecdotal and very short.

Table 5 provides a summary of selected citation attributes for articles from 1956-1985.<sup>6</sup> First, approximately 85% of the papers published from the 1956-1965 decade were never cited. Further, only one paper has four or more citations. The 1966-1975 decade produced a lower percentage (61%) for papers never cited and a higher number (twenty-six) of papers with four or more citations. The 1976-1985 decade produced an even lower percent (50%) for papers never cited and an even higher

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<sup>6</sup> For discussion purposes, the citation information for papers published during the 1986-1990 sub-period is omitted from Table 5.

<b>TABLE 4</b> <b>Summary of Education Article Attributes by Journal and Time Period</b>							
Period	Attributes	JOA (56-89)	TAR (56-87)	IJAER (66-88)	JOAE (83-90)	IAE (83-90)	Total
1956 to 1965	No. Articles	67	284				351
	Av. Art./Yr	6.70	28.40				35.10
	Av. Pages/Art.	1.79	5.67				4.93
	Av. Cits/Art.	0.13	0.24				0.22
1966 to 1975	No. Articles	90	233	22			345
	Av. Art./Yr	9.00	23.30	2.20			34.50
	Av. Pages/Art.	4.72	4.60	11.55			5.08
	Av. Cits/Art.	1.51	0.96	0.86			1.10
1976 to 1985	No. Articles	44	159	11	99	49	362
	Av. Art./Yr	4.40	15.90	1.10	9.90	4.90	36.20
	Av. Pages/Art.	9.02	7.92	15.09	9.16	8.92	8.75
	Av. Cits/Art.	1.36	2.15	1.64	1.04	1.27	1.62
1986 to 1990	No. Articles	5	11	24	137	150	327
	Av. Art./Yr	1.00	2.20	4.80	27.40	30.00	65.40
	Av. Pages/Art.	8.60	11.64	15.67	11.58	13.03	12.50
	Av. Cits/Art.	0.40	2.00	0.08	0.31	0.71	0.44
Total	Years Published	34*	33*	25	8	8	35
	No. Articles	206	687	57	236	199	1,385
	Av. Art./Yr Pub	6.06	20.82	2.28	29.50	24.88	39.57
	Av. Pages/Art.	4.78	5.92	13.96	10.56	12.02	7.75
	Av. Cits/Art.	1.00	0.95	0.68	0.62	0.68	0.85
* The journal was published for 35 years but accepted educational articles for a lesser period.							

number (thirty-nine) of papers with four or more citations. The overall decrease in the number of papers not cited and the increase in the number of papers with four or more cites suggest that the research conducted during the 1966-1985 time period was influenced by contemporary researchers and that, relatively speaking, a larger number of researchers were having an impact on the development of the accounting education literature.

Figure 2 shows the average number of pages per paper to be an increasing function of time since 1974. The increase in the average number of pages per paper is due to the fact that all of the journals evaluated, since 1956, experienced an increase in the average number of pages per article, implying a more thorough literature search and research content.

**TABLE 5**  
**Summary of Citations**  
**1956-1985**

Period	Percent Not Cited	Number of Papers with	
		4+ Cites	6+ Cites
1956-1965	84.62	1	0
1966-1975	60.82	18	8
1976-1985	49.67	30	9
All Years	65.77	49	17

**FIGURE 2**  
**Average Number of Pages/Article**

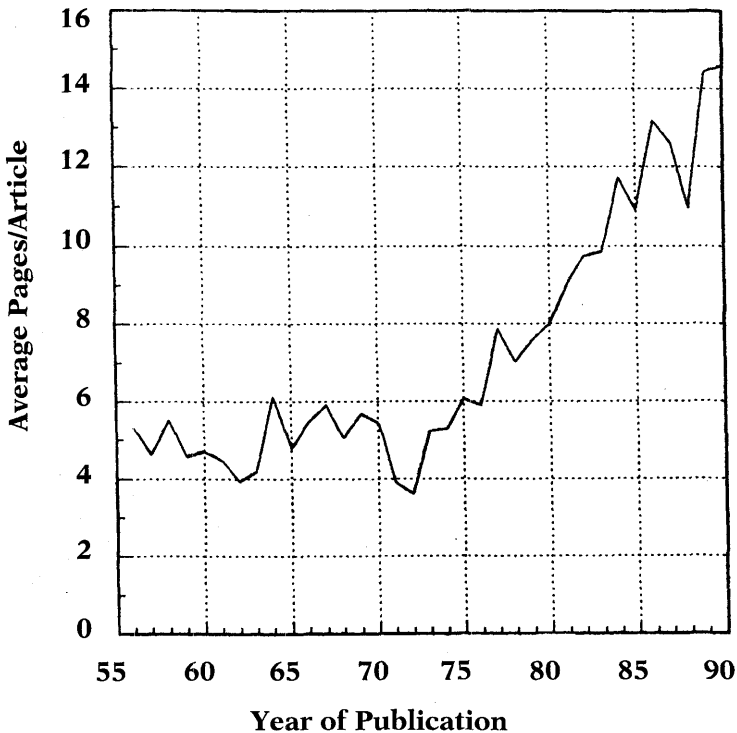


Figure 3 displays the number of papers and the number of pages from 1956-1990. During the 1956-1979 time period, the average number of education articles was stable at approximately 30 per year; however during 1981, 1982, it took a brief drop and then in 1983 increased to a new level at approximately 65 per year. On the other hand, from 1956-1982 the average number of pages published was stable at approximately 190 per year and increased to around 800 per year from 1983 onward. It is interesting to note that the increasing number of pages per article has offset the within period declines in the number of articles. Further, the appearance of the *IJAER* in 1966 did little to influence the statistics, i.e., longer articles were the major contributors to the 1966-1983 statistics.

The projection beyond 1990 is for a stabilized number of articles and total pages, absent the appearance of an additional educational journal or an increase in the frequency of publication of the *IJAER*, *JOAE*, or *IAE*.

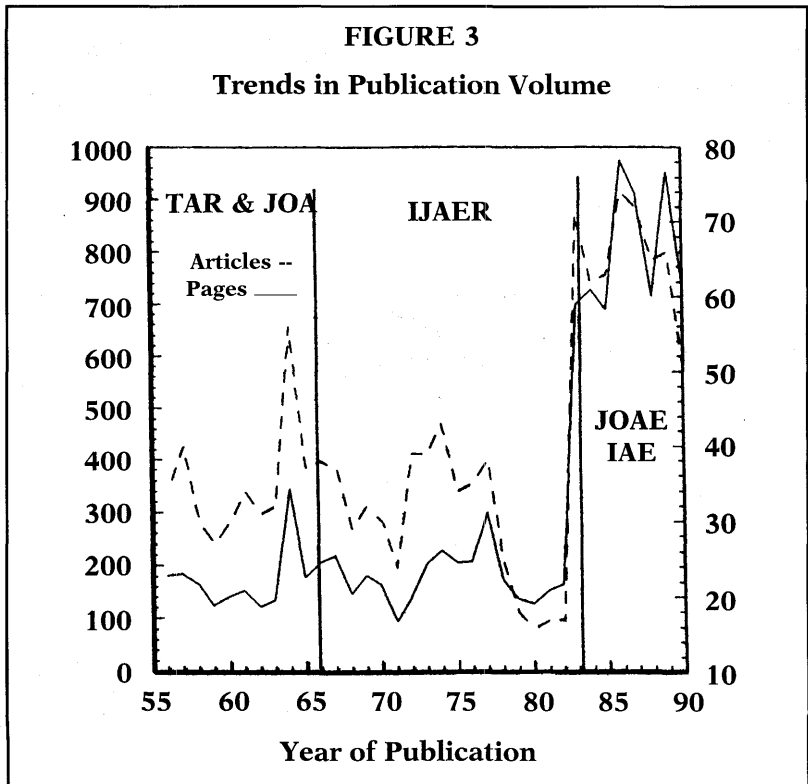


Figure 4 provides a pictorial of pages per paper from 1956-1990. The 1956-1965 time period produced more papers with four or less pages and the lowest percentage of papers with 10 or more pages. However, the opposite is true with respect to the 1976-1990 time period.

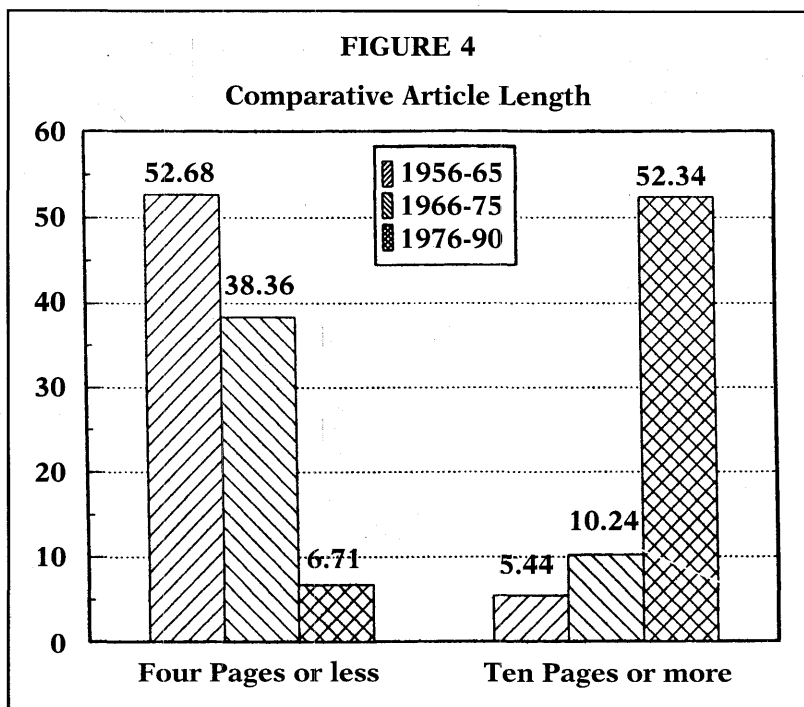


Table 6 contains the twelve most highly cited documents. Approximately 67% were published in *TAR* and 25% in the *JOA*. In terms of those twelve documents, two are concerned with curricula, four with the ranking and impact of accounting journals and/or articles and six on teaching methodology. As expected, based upon the summary of citations contained in Table 5, most (58%) of the highly cited documents are from the 1976-1985 time period.

TABLE 6

## Twelve Most Highly Cited Documents

RANK	CITATIONS	AUTHOR(S)	TITLE, JOURNAL, DATE, VOL.
8 (tie)	7	R. H. Roy and J. H. MacNeill	"Horizons for A Profession: The Common Body of Knowledge for CPAs", <i>JOA</i> , 1966, Vol. 122.
8 (tie)	7	L. J. Seidler	"International Accounting-The Ultimate Theory Course", <i>TAR</i> , 1967, Vol. 42.
1 (tie)	13	R. R. Sterling	"Accounting Research, Education and Practice", <i>JOA</i> , 1973, Vol. 136
3 (tie)	11	J. J. Benjamin and V. C. Brenner	"Perceptions of Journal Quality", <i>TAR</i> , 1974, Vol. 49.
7	8	J. C. McKeown	"Computer-Assisted Instruction for Elementary Accounting", <i>TAR</i> , 1976, Vol. 51.
6	10	C. W. Bastable	"Why Can't Johnny Account", <i>JOA</i> , 1977, Vol. 143.
11 (tie)	6	S. M. Mintz	"Internationalization of the Accounting Curriculum", <i>IJAER</i> , 1980, Vol. 16.
3 (tie)	11	M. E. Friedman	"The Effect on Achievement of Using the Computer as a Problem-Solving Tool in the Intermediate Accounting Course", <i>TAR</i> , 1981, Vol. 56.
1 (tie)	13	F. W. Windal	"Publishing for a Varied Public: An Empirical Study", <i>TAR</i> , 1981, Vol. 56.1
11 (tie)	6	B. A. Baldwin and K. R. Howe	"Secondary-Level Study of Accounting and Subsequent Performance in the First College Course", <i>TAR</i> , 1982, Vol. 57.
3 (tie)	11	T. P. Howard and L. A. Nikolai	"Attitude Measurement and Perceptions of Accounting Faculty Publication Outlets", <i>TAR</i> , 1983, Vol. 58.
8 (tie)	7	B. R. Cargile and B. Bublitz	"Factors Contributing to Pub- lished Research by Accounting Faculties", <i>TAR</i> , 1986, Vol. 61.



## TEXTUAL ANALYSIS OF THE LITERATURE

### *Journal of Accountancy*

JOA was searched<sup>7</sup> using the following four time periods—1956-1965, 1966-1975, 1976-1985, and 1986-1990. In the first period, the literature focused on recruiting students to the accounting profession and the importance of a college education for accountants.<sup>8</sup> Further, much was written concerning academic versus on-the-job training, professional development, recruiting recent graduates into accounting jobs, and accounting curriculum.<sup>9</sup> In the second time period, the focus was on requirements for CPA's, professionalism, MBA and Ph.D. programs, teaching methods, and curricula issues.<sup>10</sup> Testing was also a hot topic, especially the AICPA's test, and the CPA examination.<sup>11</sup> There were also articles on how to raise standards comparable with those in the medical and legal professions.<sup>12</sup> Finally, the issue of teaching versus research was also discussed.<sup>13</sup>

The 1976-1985 time period continued to focus on a number of topics discussed during the 1966-1975 time period. For example, professionalism, and curricula issues.<sup>14</sup> Finally, the 1986-

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<sup>7</sup> Over the time period investigated, every article in the education and professional section of *JOA* was read and evaluated. Furthermore, the Table of Contents of each issue was scanned for education articles published in the main section of the journal.

<sup>8</sup> For a discussion of each of these issues, see Graham (1956); Davis (1962); and Larsen (1956).

<sup>9</sup> For discussion of each of these issues, see Kane (1957a); Hutchinson (1957); Kane (1957b); and Brown (1962), Kesselman and Phipps (1962), Grinstead (1964), and Lynn (1965).

<sup>10</sup> For a discussion of each of these issues, see Bruschi (1969), Tyra (1973), Kistler and Guy (1975), Ashworth (1968), (1969), Cobbs (1969), Cheek (1971), Beamer (1972), and Sterling (1973); Crum (1969), (1971), (1974), Estes (1970), Patten and Smith (1973), and Morton *et al.* (1975); Brown *et al.* (1968), Wheeler (1974), and Hollenbeck (1972); and Roy and MacNeill (1966), Hart (1969), Lockly (1969), Williams (1969), (1970), and Portelli (1971).

<sup>11</sup> For a discussion of each of these issues, see North (1966), Bushlmann (1975), McCormick and Montgomery (1974), and Bastable (1977); and Hendrickson (1969), Leathers (1972), and Sanders (1972).

<sup>12</sup> See, for example, Summers (1974), and Loeb and Lubell (1972).

<sup>13</sup> See, for example, Summers and Hermance (1969), and Kennelly and Smith (1969).

<sup>14</sup> For a discussion of each of these issues, see Berton (1977), Skousen (1977), Nelson (1983), Mills (1985), Krogstad *et al.* (1981), and Newman (1981); and Miller and Davidson (1978), Lentilhon and Krzystofik (1984), Howe *et al.* (1984), Ellyson (1985), and Bastable (1977).

1990 time period produced three papers—two on 150 hour accounting program and one on accounting education history.<sup>15</sup>

### *The Accounting Review*

TAR was also evaluated employing the same time period(s) as that of JOA. For the 1956-1965 time period, most of the articles written were on teaching methods, specific accounting programs, and curricula.<sup>16</sup> Articles were also written on professional development, examination techniques, and research findings concerning reporting problems and accounting theory.<sup>17</sup>

In the 1966-1975 time period, teaching methods were also a hot research topic, particularly with the aid of computers, along with curricula issues, and how to teach specific accounting issues.<sup>18</sup> Other items that were discussed less frequently included

<sup>15</sup>For a discussion of each of these issues, see Collins (1989), and Nelson (1989); and Langenderfer (1987).

<sup>16</sup>For a discussion of each of these issues, see Perry and Walker (1957), Homburger (1957), Maxwell (1957), Stevens (1956), Sadler (1958), Mikesell (1959), Woolsey (1959), Holmes (1959), De Reyna (1959), Lagrone (1960), Stone (1961), Schonefeld and Holzer (1962), Yager (1963), Horngren (1963), Pescow (1963), Parker (1965), Sommerfeld (1965), and Nielsen (1965), Firmin (1959), Christiansen (1961), Daniels (1958), Ashburne (1958), Prickett (1958), Stone (1965), and Kublin (1965); and Langenderfer and Weinrum (1956), Heim (1959), Cyert and Wheeler (1960), Fertig (1960), Rosenfeld and Ledley (1961), Zukowska (1961), Wasley (1963), Kemp (1963), and Mandel (1963).

<sup>17</sup>For a discussion of each of these issues, see Cook (1960), Matusiak (1960), Nye (1958), Smith (1959), Jones (1962), and Sidebotham (1965); North (1956), and Rilly (1958); and Smith (1956), Rossell (1958), Whitney (1958), Stone (1959), Dunn (1960), Green (1961), Jennings (1960), Patrick (1961), McGowen (1962), Spiller (1962), Perry (1963), Green (1963), Rushing (1965), and Snudden (1965).

<sup>18</sup>For discussion of each of these issues, see Ray (1966), Penick (1966), Malcolm (1966), Zannetos (1967), Buckley (1967), Anderson (1967), Burns (1968), Zeff (1968), Doney (1969), Carmichael and Willingham (1969), Singer (1970), Manes (1970), Arnes *et al.* (1970), Wilkinson (1971), Perrit (1971), Raff (1971), McCosh (1972), Streuling and Holstrum (1972), Sale (1972), Markell and Pemberton (1972), Edwards (1973), DeCoster and Prater (1973), Kinney (1974), and Ziieha (1974); Allyn (1966), Heims (1966), Roller and Williams (1967), Seidler (1967), Bowen (1967), Haseman (1968), Bergolofsky (1968), Buckley (1969), Campfield (1970), Madden (1970), Askins (1970), Cloyd (1971), Schroeder (1972), McCormick (1973), Gosman (1973), Seiler and Label (1974), Hise (1974), and Deakin and Summers (1975); and Hartman (1966), Lindbeck (1966), Faux (1966), Hobbs (1966), Keister (1967), Carlson (1967), Thomas (1968), Garrison (1968), Hirsch (1969), Murphy (1970), Bird and Jones (1970), Nurnberg and Grube (1970), Goetz (1971), Huefner (1972), Crumbley (1972), Cramer (1972), McCray (1972), Mock (1972), Bierman (1973), Weil (1973), Frank (1974), Edwards and Johnson (1974), Corcoran and Leininger (1975), and Nash (1975).

professional development, recruitment of students to accounting, examinations and grading, placement of students from high school and research quality.<sup>19</sup>

The 1976-1985 time period continued the education research pattern established in the 1966-1975 decade with research concentrations in the area of teaching methods, accounting programs, teaching of specific accounting issues, and student achievement.<sup>20</sup> Other less frequently discussed issues included faculty recruitment, faculty research contributions and rankings, examinations and grading, and the accounting curriculum.<sup>21</sup>

Very few articles were found during the 1986-1990 time period because *TAR* only published education articles in 1986, 1987, and one issue in 1988. In terms of those articles found, they focused on such research areas as student job performance, first year college-level accounting courses, faculty productivity, student's ability to learn with the aid of microcomputers, and teaching methodology.<sup>22</sup>

### *Issues in Accounting Education*

IAE was evaluated over the 1983-1990 time period. The research published in the IAE was spearheaded by articles in the

<sup>19</sup> For discussion of each of these issues, see Williams (1966), Townsend (1967), Goetz (1967), and Carpenter and Strawser (1971); Anderson (1966), and Dixon (1970); Brown (1966), Patten and Stinmetz (1966), Glein and Wallace (1974), Paretta and Chadwick (1975); Tambrino (1968); Needles (1973), McNeill and Collins (1975), and Belkaoui (1975); and Benjamin and Brenner (1974).

<sup>20</sup> For a discussion of each of these issues, see McKeown (1976), Laughlin, *et al.* (1976), Call (1977), Jarnagin, *et al.* (1977), Throckmorton and Talbott (1978), Grossman and Strawser (1978), Bailes (1979), Groomer (1982), Howell and Johnson (1982), and Patton (1982); Bremser, *et al.* (1977), Tidwell and Wyndelts (1977), Rayburn and Bonfield (1978), Crum (1978), Crum (1981), Reeve (1983), Arnold and Geiselhart (1984), Clark and Sweeney (1985), and Crum and Garner (1985); Capettini and King (1976), Liao (1976), Shank and Churchill (1977), Malcolm (1978), Stallman (1979), Bentz (1979), Revsine (1981), Dillon (1981), Hobbs and Bainbridge (1982), Williamson (1982), Manes (1983), Revsine (1984), and Chasteen (1984); and Pawliczek (1977), Zikmund (1977), Battista (1978), Friedman (1981), Baldwin and Howe (1982), and Amernic and Beechy (1984).

<sup>21</sup> For a discussion of each of these issues, see Mehl and Lammers (1979), and Kida and Mannino (1980); Andrews and McKenzie (1978), Windal (1981), Howard and Nikolai (1983), and Williams (1985); Frakes and Foran (1978); Burton, *et al.* (1978), and Delaney, *et al.* (1979); and Arens and Ward (1984).

<sup>22</sup> For discussion of each of these issues, see Knechel and Snowball (1987); Vruwink and Otton (1987), and Eskew and Faley (1988); Cargile and Bublitz (1986), Jacobs, *et al.* (1986); Borthick and Clark (1986); and Kinney (1986).

area of computer assisted instruction, teaching specific accounting concepts and methodologies, ranking of accounting faculty and productivity, accounting curricula issues, learning and student performance, and faculty performance.<sup>23</sup>

### *Journal of Accounting Education*

JOAE was evaluated over the same time period as IAE. computer assisted instruction, teaching methods, assessment of student learning, faculty research, testing and grading, and curricula were the most researched topics.<sup>24</sup>

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<sup>23</sup> For discussion of each of these issues, see Petersen and Grimlund (1983), Fетters, *et al.* (1986), Helmi (1986), Abraham, *et al.* (1987), Borthick and Clark (1987), Gunn (1988), Fuglister and Murdock (1988), Steinbart (1989), and Boer and Livnat (1990); Seifrick (1983), Davis (1983), Hicks and Richardson (1984), Partington (1984), Dillaway (1984), Ketz and Largay (1985), Coombes and Eddey (1986), Nurnberg (1986), Murphy (1987), Martin (1987), Dugan and Zavgren (1988), Ijiri (1988), Nurnberg and Sweeney (1989), Govindarajan and Shank (1989), Schadowald and Limberg (1990), and Anderson, *et al.* (1990); Bublitz and Kee (1984), Gamble and O'Doherty (1985), Campbell and Morgan (1987), Milne and Vent (1987), Schroeder and Saftner (1989), and Hagerman and Hagerman (1989); Brown and Blake (1983), Campbell and Williams (1983), Schwartz and Stout (1987), Siegel (1987), Gaffney and Schwartz (1988), Langenderfer and Rockness (1989), Schroeder (1986), Mutchler, *et al.* (1987), Ault and Carver (1987), Kapoor (1988), Elikai and Baker (1988), Lipe (1989), Tyson (1989), and Parry (1990); and Ostrowski (1986), Hooper and Page (1986), and Bunn (1986).

<sup>24</sup> For discussion of each of these issues, see Kalbers (1984), Stern (1985), Anderson (1985), Dickens and Harper (1986), Izard and Reeve (1986), Bean and Medewitz (1987), Marshall, *et al.* (1987), Pearson and Gauntt (1987), and Lehman and Lehman (1988); Vigeland (1983), Mecimore and Morgan (1983), Tondkar and Coffman (1984), Crosby (1984), Bush (1985), Howard (1985), Seville and Gray (1986), Engle and Joseph (1986), Park and Hartman (1987), Joy (1987), Reed (1988), Crockett and McKee (1988), Groff (1989), Yardley (1989), Holmen, *et al.* (1990), and Cenker and Bloom (1990); Buehlmann and Techavichit (1984), Stout and Bonfield (1986), Baker, *et al.* (1987), Brown and Burke (1987), Clark and Schwartz (1989), Baldwin, *et al.* (1989), and Ott, *et al.* (1990); Rouse and Shockley (1984), Keys and Hendricks (1984), Schwartz (1984), Fellows and Spence (1985), Gamble and O'Doherty (1985), Heck and Huang (1986), Saftner (1988), Lehman and Street (1990), and Czyzewski and Dickinson (1990); Baldwin and Howard (1983), Baldwin (1984), Neyhart and Abrassart (1984), Collier and Mehrens (1985), Lathen (1985), Gruber (1987), and Mitchell (1988); and Agami (1983), Cherry and Reckers (1983), May and Arevalo (1983), McKeon and Bockanic (1984), Cao and Buchanan (1985), Egenolf and Nordhauser (1985), Corman (1986), Flesher and Rescho (1986), Armstrong (1987), Smith (1988), Hirsch and Collins (1988), Bayer, *et al.* (1989), Scribner and Dillaway (1989), Fетters, *et al.* (1989), and Novin, *et al.* (1990).

## *International Journal of Accounting Education and Research*

IJAER was evaluated from 1966-1990. The 1966-1975 time period focused on educational practices in different countries, accounting curricula issues, and accounting concepts.<sup>25</sup> The 1976-1985 time period also focused on educational practices in different countries, accounting curricula issues, and the development of international accounting standards.<sup>26</sup> The 1986-1990 time period continued to produce papers on accounting curricula issues, accounting reporting issues, international accounting standards, and the development of accounting practice.<sup>27</sup>

### SUMMARY AND CONCLUSIONS

Since 1956, the accounting education literature has experienced a number of changes. It has gone from occupying a section in two major journals to having two journals devoted exclusively to educational issues. After the new journals were established, the *JOA* and *TAR* went from being major to minor publishers in this area, thus completing the birth cycle of a new field of study. Further, the reading of the educational literature over time has given the authors the impression that educational issues addressed have changed in scope and methodology. For example, during the earlier years research emphasis was placed on professional development, five year accounting programs, student testing and teaching aids. However, the more recent articles have shifted from teaching notes to empirical based

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<sup>25</sup> For discussion of each of these issues, see Ninsuvannakul (1966), Salas (1967), Markell (1968), Ogundele (1969), Chu (1969), and Costouros (1975); Mautz (1967), Bowles (1968), Bomeli (1969), Dascher, *et al.* (1973), Kubin (1973), Schoenfeld (1974), Ameiss (1974), Neumann (1974), Clay (1975), and Wolk and Briggs (1975); and Littleton (1966), Kosiol (1967), and Kohler (1967).

<sup>26</sup> For discussion of each of these issues, see Ghartey (1978), Markell (1985), and Abdeen and Yavas (1985); Mintz (1980), Barlev and Friedman (1982), and Heaston (1983); Violet (1983a), (1983b), Mckinnon and Janell (1984), and Ndubizu (1984).

<sup>27</sup> For discussion of each of these issues, see Juchau *et al.* (1986), Foroughi and Reed (1987), Agami and Alkafaji (1987), and Foo (1988); Purcell and Scott (1986), Abdel-Magid and Cheung (1986), Pratt and Behr (1987), Ahmed and Zeghal (1987), Douppnik (1987), Gray and Miranti (1988), Tondkar (1989), Agrawal (1989), Hamer and Kistler (1990), Hooper and Liao (1990), and Douppnik and Rolfe (1990); Ainajjar (1986), Taylor, *et al.* (1986), Hove (1989), Rivera (1989), Bloom and Naciri (1989), and Lefebvre and Lin (1990); and Koch (1986), Chan (1986), Rivola-Clay and Douppnik (1987), Hamer and Kistler (1987), Mak (1989), Brankovic and Madura (1990), and Aitken (1990).

studies focusing on such issues as, the improvement of methodologies used to test student achievement and testing methods, ranking of accounting faculty and faculty productivity and accounting concepts. With regard to the character of those empirical research based articles, [Herring, *et al.*, 1989, p.50] made the following observations:

Analysis of the empirical research articles indicates that this work has a distinctive character and that it has changed in several important respects in recent years. The empirical studies were classified by type of study (descriptive studies, surveys, forecasts, and experiments), by type of statistics used in the study (descriptive or inferential) . . . The analysis by type of study . . . indicates that surveys and experiments play an important role in this work. The analysis by type of statistics shows an increase in the use of inferential statistics.

The analysis of the data suggests that the 1976-1985 decade was the most productive in terms of the number of articles, average number of pages per article, and the average number of citations per paper. Further, that productivity was spearheaded by *TAR*, *IJAER*, and *JOA*, respectively. The most frequently cited articles are Sterling [1973] and Windal [1981] and papers on teaching methods have produced the highest number of influential papers in the list of the twelve most highly cited papers (this is consistent with the fact that the majority of educational papers have been written in the area of teaching methods).

The tendency for earlier published papers to be cited less frequently than current ones (87% are to articles published zero to seven years) suggests that, in terms of the time period investigated, the education literature was being influenced by contemporary education researchers (see Table 3). According to Price's [1970] immediacy index, which is the percent of total references that cite literature in the last five years, the education literature has an immediacy index of approximately 71% which means that it is relatively young in terms of those manuscripts used to generate research ideas. This position is also supported by the summary information contained in Table 4 which displays the fact that the most recent decade (1976-1985) has the highest average citations per paper and the oldest decade (1956-1965) the lowest average citations per paper. The immediacy index for the accounting education literature (71%) and the agency theory literature (76%) are approximately equal [Gamble, *et al.*, 1985 p. 25]. The above mentioned citation practice also supports

Bricker's [1988] finding that accounting scholars tend to cite very recent literature.

This study also chronicles the development of modern accounting education literature. The early years of this study were marked by a number of short papers with few citations, followed by a period of consolidation in which the papers were more lengthy and cited more previous works, and finally developing into greater specialization with yet longer papers and fewer, more selected references. Using the first decade of our study period as the base, the second decade (1966-1975) produced an increase of approximately five hundred percent in average citations per paper, a 3% increase in average pages per paper, and a 2% decrease in average papers per year. On the other hand, the 1976-1985 decade (using the 1966-1975 time period as the base) produced a 47% increase in average citations per paper, a 75% increase in average pages per paper, and a 5% increase in average papers per year. This decade was greatly influenced by *TAR* followed by *IJAER* and *JOA* respectively. Further, *TAR*'s influence was spearheaded by articles in the area of computer assisted instruction, ranking of accounting journals and the evaluation of student performance in an accounting course.

Given the increase in the proportion of articles based on empirical research and the decrease in the proportion of nonempirical articles, it is possible that education research could be elevated to the status of a sub-field used in the promotion and tenure decision(s) in the same manner as information systems, taxation, etc. Finally, it appears that increased emphasis on teaching excellence by the accounting profession and institutions of higher education, improvements in computer hard and software and, research methodologies imported from other disciplines such as psychology, mathematics and economics have all contributed to the change in the accounting education literature.<sup>28</sup>

Finally, one should remember that, as with any research tool, citation analysis has limitations. One major limitation centers around an author's motivation for citing a document. That is, intellectual merit is not the only reason why an article may be

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<sup>28</sup> Our observation regarding the influence of other fields in the development of the accounting education is consistent with that of Herring, *et al.* (1989, p. 49) who state that "... recent accounting education research is overcoming its early reluctance to incorporate related work in other fields, particularly since 1983."

cited. An author may wish to give the impression that the paper is related to work that has been performed by premiere scholars, thus loading the paper with many unwarranted citations. Others cite to build up a friend's or their own citation count or to flatter a superior.<sup>29</sup> Another limitation in collecting cites has to do with sloppy bibliographic practices. For example, Joe J. Cramer, Jr. might be cited as J. Cramer or J.J. Cramer. Thus depending on whether the researcher knows or has an idea of the number of possible combinations for each author's name, (especially in the case of a computer search) it is possible that all of the citations for a particular author will not be included in the final citation count. There is a problem associated with negative versus positive citations. That is, was the paper cited because it contained an error or was it cited to support, apply, compare, or simply make note of a concept. To the extent possible, negative citations should be excluded from the final citation count. This can be achieved by performing a citation context analysis.<sup>30</sup> Finally, citation counts are also influenced by a journal's editorial mandate to increase the number of authorities cited in papers accepted for publication so that their implied quality can increase. An increase use of citations for peer review may also cause an increase in citations. Concisely stated, in conducting citation research one should try to eliminate, to the extent possible, illegitimate citations.

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<sup>29</sup>Garfield (1979) notes that biased and inconsistent bibliographic practices are a random phenomenon and therefore cancel each other out across citing authors. It should be noted that self-citations were excluded from the final citation count(s).

<sup>30</sup>A citation context analysis was performed when the authors read the papers to determine the subject matter contained in the papers collected.



Appendix A  
 Number of Articles by Year and Journal

Year	JOA	TAR	IJAER	JOAE	IAE	Total
1956	4	30				34
1957	6	34				40
1958	4	26				30
1959	3	24				27
1960	3	27				30
1961	14	20				34
1962	9	22				31
1963	9	23				32
1964	9	47				56
1965	6	31				37
1966	10	26	2			38
1967	8	25	4			37
1968	8	19	2			29
1969	12	17	3			32
1970	11	18	1			30
1971	9	15	0			24
1972	8	31	0			39
1973	8	28	3			39
1974	8	32	3			43
1975	8	22	4			34
1976	6	29	0			35
1977	7	31	0			38
1978	2	22	1			25
1979	3	15	0			18
1980	5	10	1			16
1981	3	14	0			17
1982	5	10	2			17
1983	6	10	2	33	20	71
1984	2	11	3	32	14	62
1985	5	7	2	34	15	63
1986	0	4	7	35	28	74
1987	4	4	5	29	30	72
1988	0	3	2	26	34	65
1989	1	0	5	25	35	66
1990	0	0	5	22	23	50
Totals	206	687	57	236	199	1,385

# REFERENCES

- Bricker, R., "Knowledge Preservation in Accounting: A Citational Study," *Abacus* (September 1988), pp. 120-31.
- , "An Empirical Investigation of the Structure of Accounting Research," *Journal of Accounting Research* (Autumn 1989), pp. 246-62.
- Cole, J.R. and S. Cole, "Citation Analysis," Letter to the editor, *Science* (January 11, 1974), pp. 32-34.
- Gamble, G., and B. O'Doherty, "How Accounting Academicians Can Use Citation Indexing and Analysis for Research," *Journal of Accounting Education* (Fall 1985a), pp. 123-44.
- Gamble, G., B. O'Doherty, and L. Hyman, "The Development of Agency Thought: A Citation Analysis of the Literature," *Accounting Historians Journal* (Spring 1987), pp. 8-26.
- Garfield, E., *Citation Indexing - Its Theory and Application in Science Technology and Humanities* (John Wiley & Sons, 1979).
- Heck, J. L., and J. C. Huang, "Peer Assessment versus Citation Analysis of Contributions to the Accounting Literature," *Advances in Accounting* (1987), pp. 153-162.
- Heck, J. L. and W. G. Bremser, "Six Decades of The Accounting Review: A Summary of Authors and Institutional Contributions," *The Accounting Review* (October 1986), pp. 735-744.
- Heck, J. L., R. L. Jensen, and P. L. Cooley, "Analysis of Contributors to the Accounting Literature. Part I—The Aggregate Performances," *International Journal of Accounting Research* (Fall 1990), pp. 26-38.
- , "Analysis of Contributors to the Accounting Literature. Part II—The Individual Academic Accounting Journals," *International Journal of Accounting Research* (Spring 1991), pp. 46-67.
- Herring, III, H.C., J. H. Scheiner, and J. R. Williams, "The Development of Education Research in Accounting," *Issues in Accounting Education*, (Spring 1989), pp. 48-57.
- Lehman, M. W. and D. L. Street, "A Taxonomy of Content and Citations in the Journal of Accounting Education (1983-1989)," *Journal of Accounting Education* (Spring 1990), pp. 63-75.
- Price, D.J.D., "Citation Measures of Hard Science, Soft Science, Technology and Non-Science," in Nelson, C.E. and D.K. Pollock (eds.) *Communication Among Scientists and Engineers* (D.C. Heath, 1970), pp. 3-22.
- Small, H.G., "Co-Citation in the Scientific Literature: A New Measure of the Relationship Between Two Documents," *Journal of the American Society for Information Science* (March 1973), pp. 265-269.

# REFERENCES FOR TEXTUAL ANALYSIS

## *Journal of Accountancy*

- Ashworth, John. "People Who Become Accountants," *Journal of Accountancy* (November 1968): 43-49.
- Ashworth, John. "The Pursuit of High Quality Recruits," *Journal of Accountancy* (February 1969): 53-58.
- Beamer, Elmer G. "Continuing Education—A Professional Requirement," *Journal of Accountancy* (January 1972): 33-39.
- Bedingfield, James P. "Analyzing the Effect of CASB Standards on Business," *Journal of Accountancy* (April 1980): 68-78.

- Berliner, Robert W. and Dale L. Gerboth. "FASB Statement No. 33: The Great Experiment," *Journal of Accountancy* (May 1980): 48-56.
- Berton, Lee. "Arthur Young Professors' Roundtable: Accounting Education—New Horizon for the Profession," *Journal of Accountancy* (May 1977): 32-37.
- Brown, James E., et al. "The Use of Business Games in Introductory Accounting Courses—Retrospective and Prospective," *Journal of Accountancy* (July 1968): 85-88.
- Brown, R. Gene. "Mathematics and Statistics in the Accounting Curriculum," *Journal of Accountancy* (January 1962): 83-86.
- Brown, Paul R. and Phillip C. Lint. "Co-Teaching: A Key to Auditing Instruction," *Journal of Accountancy* (September 1982): 94-98.
- Bruschi, William C. "Issues Surrounding Qualifying Experience Requirements," *Journal of Accountancy* (March 1969): 47-54.
- Buehlmann, David M. "ISU's Use of the AICPA's College Testing Program," *Journal of Accountancy* (May 1965): 93-96.
- Burton, John C. "A Symposium on the Conceptual Framework," *Journal of Accountancy* (January 1977): 53-58.
- Cheek, Billy K. "The Development of a Professional," *Journal of Accountancy* (February 1971): 85-87.
- Cobbs, John C. "How the Business Press Values the Accounting Professor," *Journal of Accountancy* (August 1969): 48-51.
- Crum, William F. "A Second Survey of Doctoral Programs in Accounting," *Journal of Accountancy* (June 1971) 86-89.
- Crum, William F. "Newest Survey of Doctoral Programs in Accounting," *Journal of Accountancy* (October 1974): 99-104.
- Crum, William F. "A Survey of Doctoral Programs in Accounting," *Journal of Accountancy* (January 1969): 87-89.
- Davidson, Sidney, Steven F. Rasch and Roman L. Weil. "Behavior of the Deferred Tax Credit Account 1973-1982," *Journal of Accountancy* (October 1984): 138-142.
- Davis, Sidney. "University Education for Accounting," *Journal of Accountancy* (December 1962): 80-82.
- Defliese, Phillip L. "The Search for a New Conceptual Framework of Accounting," *Journal of Accountancy* (July 1977): 59-67.
- Ellyson, Robert C., A. Tom Nelson and James H. Mac Neil. "Educating Tomorrow's CPA," *Journal of Accountancy* (October 1985): 95-105.
- May, Kenneth J. "Accounting for Regulatory Operations: FASB Statement No. 71," *Journal of Accountancy* (August 1986): 84-97.
- Estes, Ralph W. "A Ranking of Accounting Programs," *Journal of Accountancy* (July 1970): 86-90.
- Gerboth, Dale L. "Accounting Scholasticism: The FASB's Preliminary Views on Pension Accounting," *Journal of Accountancy* (January 1984): 111-117.
- Graham, Willard J. "How Can the Colleges Serve the Profession?" *Journal of Accountancy* (February 1956): 45-50.
- Grinsted, Clayton P. "Teaching the Ethics of Accounting," *Journal of Accountancy* (July 1964): 82-85.
- Harris, Andrew A. and Ralph E. Smith. "Accounting for Marketable Equity Securities," *Journal of Accountancy* (February 1977): 54-66.
- Hart, Donald J. "An Outsider Looks at the Accounting Curriculum," *Journal of Accountancy* (March 1969): 87-89.
- Hendrickson, H. S. "The Changing Content of the CPA Examination," *Journal of Accountancy* (February 1969): 60-67.

- Hollenbeck, Lyle. "Continuing Education—Audio Cassettes," *Journal of Accountancy* (August 1972): 84-90.
- Howe, Keith R., Kent Pany and Janice Stemmler. "Selecting An Accounting Doctoral Program," *Journal of Accountancy* (September 1984): 62-66.
- Hutchinson, William P. "Professional Development," *Journal of Accountancy* (November 1957): 31-36.
- Johnson, Hans V. "A Survey of New Partners," *Journal of Accountancy* (July 1975): 87-90.
- Kane, Robert L. "Education and Training of Public Accountants," *Journal of Accountancy* (October 1957a): 69-71.
- Kane, Robert L. "Shortage of Accounting Graduates," *Journal of Accountancy* (November 1957b): 65-67.
- Kennelly, John W. and John H. Smith. "More on Research and Teaching," *Journal of Accountancy* (July 1969): 86-87.
- Kesselman, Jerome J. and David W. Phipps. "Education for Decision Making Through Accounting Instruction," *Journal of Accountancy* (February 1962): 85-87.
- King, Thomas E. and Valdean C. Lemlike. "Reporting Investor Income Under the Equity Method," *Journal of Accountancy* (September 1976): 65-72.
- Kistler, Linda H. and Joseph P. Guy. "An Evaluation of Professional Certification Programs in Accounting," *Journal of Accountancy* (September 1975): 104-108.
- Krogstad, Jack L., et al. "The Faculty Residency: A Concept Worth Considering," *Journal of Accountancy* (November 1981): 74-86.
- Larsen, Roy. "The Crisis in Education," *Journal of Accountancy* (January 1956): 29-33.
- Leathers, Park. "Relationship of Test Scores to CPA Examination Performance," *Journal of Accountancy* (September 1972): 101-103.
- Lentilhon, Robert W. and T. Krzystofik. "Education, Preparation and Examination of the CPA," *Journal of Accountancy* (June 1984): 129-134.
- Lockley, Lawrence C. "Some Comments Regarding University Education," *Journal of Accountancy* (May 1969): 94-97.
- Loeb, Stephen E. and Myron S. Lubell. "Continuing Education: A Selective Interprofessional Review," *Journal of Accountancy* (February 1972): 85-87.
- Lynn, Edward S. "Professional School of Accountancy," *Journal of Accountancy* (May 1965): 87-90.
- McCormick, Ronald R. and James B. Montgomery. "The Use of AICPA Tests in Evaluating Transfer Students at A University," *Journal of Accountancy* (August 1974): 82-88.
- Miller, Paul B. W. "The Conceptual Framework: Myths and Realities," *Journal of Accountancy* (March 1985): 62-67.
- Miller, Robert H. "Views on Education and Experience Requirements," *Journal of Accountancy* (October 1985): 106-117.
- Miller, Herbert E. and Sidney Davidson. "Accreditation: Two views," *Journal of Accountancy* (March 1978): 56-65.
- Morton, James P. and Stephen A. Zeff and John Grant Rhodes. "Comments and a Response on Ranking Accounting Faculties and Doctoral Programs," *Journal of Accountancy* (February 1973): 103-109.
- Nelson, A. Tom. "Accounting Education's Growing Crises," *Journal of Accountancy* (April 1983): 70-80.
- Neumann, Frederick L. "The Case For On-the-Job Training," *Journal of Accountancy*, (October 1981): 80-91.

- North, Robert O. "AICPA Tests as Predictors of Professional Success," *Journal of Accountancy* (August 1966): 80-81.
- Patten, Ronald J. and Jay M. Smith. "Graduate Education in Accounting: the Dilemma," *Journal of Accountancy* (December 1973): 85-89.
- Portelli, Alan. "A Worm's Eye View of Accounting Education," *Journal of Accountancy* (October 1971): 94-96.
- Sanders, Howard P. "Factors in Achieving Success on the CPA Examination," *Journal of Accountancy* (December 1972): 85-88.
- Skousen, K. Fred. "Accounting Education: The New Professionalism," *Journal of Accountancy* (July 1977): 54-58.
- Sprouse, Robert T. "The Importance of Earnings in the Conceptual Framework," *Journal of Accountancy* (January 1977): 64-71.
- Summers, Edward L. and Robert M. Hermanson. "Professors and Practitioners," *Journal of Accountancy* (August 1969): 85-88.
- Summers, Edward L. "Accounting Educations New Horizons," *Journal of Accountancy* (September 1974): 56-63.
- Tyra, Anita I. "Standards for Professional Training and Examination in the Netherlands," *Journal of Accountancy* (March 1973): 50-60.
- Wheeler, James G. "Teaching the Measurement of Federal Income Taxes for Accounting Purposes," *Journal of Accountancy* (March 1974): 87-90.
- Williams, Doyle Z. "Reactions to 'Horizon for a Profession'," *Journal of Accountancy* (June 1969): 81-84.
- Williams, Doyle Z. "A Survey of Accounting Education," *Journal of Accountancy* (February 1970): 85-89.

#### *The Accounting Review*

- Allyn, Robert C. "Accreditation of Accounting Curriculum," *The Accounting Review* (April 1966): 303-311.
- Amernic, Joel H. and Thomas H. Beechy. "Accounting Students' Performance and Cognitive Complexity: Some Empirical Evidence," *The Accounting Review* (April 1984): 300-313.
- Anderson, John J. "Integrated Instruction in Computers and Accounting," *The Accounting Review* (July 1967): 587-588.
- Anderson, William T. "Recruiting Capable Students to Accounting," *The Accounting Review* (April 1966): 331-333.
- Andrew, Wesley T. and Patrick B. McKenzie. "Leading Accounting Departments Revisited," *The Accounting Review* (January 1978): 135-138.
- Arens, Alvin A. and D. Dewey Ward. "The Use of a Systems Understanding Aid in the Accounting Curriculum," *The Accounting Review* (January 1984): 98-108.
- Arens, Alvin A., Robert G. May and Geraldine Dominiak. "A Simulated Case for Audit Education," *The Accounting Review* (July 1970): 573-578.
- Arnold, Donald F. and Thomas J. Geiselhart. "Practitioners' Views on Five-Year Educational Requirements for CPAs," *The Accounting Review* (April 1984): 314-324.
- Ashburne, Jim C. "The Five-year Professional Program," *The Accounting Review* (January 1958): 106-110.
- Askins, Billy E. "Determining the Effectiveness of Programmed Instruction: A Training Course Example," *The Accounting Review* (January 1970): 159-163.
- Bailes, Jack C. "Lectures Versus Personalized Instruction: An Experimental Study in Elementary Managerial Accounting," *The Accounting Review* (January 1979): 147-154.

- Baldwin, Bruce A. and Keith R. Howe. "Secondary-Level Study of Accounting and Subsequent Performance in the First College Course," *The Accounting Review* (July 1982): 619-626.
- Battista, Marianne S. "The Effect of Instructional Technology and Learner Characteristics on Cognitive Achievement in College Accounting," *The Accounting Review* (April 1978): 477-485.
- Beechy, Thomas E. and Wayne A. Bernath. "The Measurement of Economic Activity: An Introductory Accounting Course," *The Accounting Review* (April 1971): 385-386.
- Belkaoui, Ahmed. "Learning Order and Acceptance of Accounting Techniques," *The Accounting Review* (October 1975): 897-898.
- Bentz, William F. "Computer Extended Reciprocal Allocation Methods," *The Accounting Review* (July 1979): 595-603.
- Bierman, Jr., Harold. "Accounting for Capitalized Leases: Tax Considerations," *The Accounting Review* (April 1973): 421-424.
- Bird, Francis A. and Phillip A. Jones. "A Decision-Tree Approach to Earnings per Share," *The Accounting Review* (October 1970): 779-782.
- Borthick, A. Faye and Ronald L. Clark. "The Role of Productive Thinking in Affecting Student Learning with Microcomputers in Accounting Education," *The Accounting Review* (January 1986): 143-157.
- Bowen, Earl K. "Mathematics in the Undergraduate Business Curriculum," *The Accounting Review* (October 1967): 782-787.
- Boyd, Orton W. "That Federal Tax Course," *The Accounting Review* (January 1956): 131-135.
- Bremser, Wayne G. Vincent C. Brenner and Paul E. Dascher. "The Feasibility of Professional Schools: An Empirical Study," *The Accounting Review* (April 1977): 465-473.
- Brenner, Vincent C. "Some Observations on Student Values and Their Implications for Accounting Education," *The Accounting Review* (July 1973): 605-608.
- Brown, Robert O. "Predictions of Accounting Grades," *The Accounting Review* (April 1966): 340-343.
- Buckley, John W. "Programmed and Non-Programmed Instruction: Integration Criteria in Curriculum Design," *The Accounting Review* (April 1969): 389-397.
- Buckley, John W. "Programmed Instruction: With Emphasis on Accounting," *The Accounting Review* (July 1967): 572-587.
- Burns, Thomas J. "Accounting Courses at Nineteen American Universities," *The Accounting Review* (January 1968): 137-146.
- Burton, E. James, James C. McKeown, and Jeffrey L. Schlosberg. "The Generation and Administration of Examinations on Interactive Computer Systems," *The Accounting Review* (January 1978): 170-178.
- Call, William C. "General Versus Specific Price-Level Adjustments: A Graphic Analysis," *The Accounting Review* (January 1977): 222-228.
- Campfield, William L. "Toward Making Accounting Education Adaptive and Normative," *The Accounting Review* (October 1970): 683-689.
- Capettini, Robert and Thomas E. King. "Exchanges of Nonmonetary Assets: Some Changes," *The Accounting Review* (January 1976): 142-147.
- Cargile, Barney and Bruce Bublitz. "Factors Contributing to Published Research by Accounting Faculties," *The Accounting Review* (January 1986): 158-178.
- Carlson, Marvin L. "An Application of Concepts in the Theory Course," *The Accounting Review* (July 1967): 596-597.

- Carmichael, D. R. and John J. Willingham. "New Directions in Auditing Education: A Proposal for the Undergraduate Course," *The Accounting Review* (July 1969): 611-614.
- Carpenter, Charles C. and Robert H. Strawser, "A Study of the Job Satisfaction of Academic Accountants," *The Accounting Review* (July 1971): 509-518.
- Cattanach, Richard L. and Glyn W. Hanbery. "Audit Planning: An Application of Network Analysis," *The Accounting Review* (July 1973): 609-611.
- Chasteen, Lanny. "A Taxonomy of Price Change Models," *The Accounting Review* (July 1986): 515-523.
- Christiansen, Irving K. "Bringing Reality into the Accounting Program," *The Accounting Review* (April 1961): 293-296.
- Clark, Ronald L. and Robert B. Sweeney. "Admission to Accounting Programs: Using a Discriminant Model as a Classification Procedure," *The Accounting Review* (July 1985): 508-518.
- Cloyd, Helen M. "Optimum Course Requirements for Nonaccounting Majors," *The Accounting Review* (July 1971): 591-593.
- Cook, John W. "Public Accounting Experience for Private Accountants," *The Accounting Review* (January 1960): 93-95.
- Corcoran, A. Wayne and Wayne E. Leininger. "Isolating Accounting Variances via Partitioned Matrices," *The Accounting Review* (January 1975): 184-188.
- Cramer, Jr., Joe J. "Incompatibility of Bad Debt 'Expense' with Contemporary Accounting Theory," *The Accounting Review* (July 1972): 596-598.
- Crum, William F. and Don E. Garner. "1983 Survey of Doctoral Programs in Accounting in the United States and Canada," *The Accounting Review* (July 1985): 519-525.
- Crum, William F. "1980 Survey of Doctoral Programs in Accounting in the United States," *The Accounting Review* (July 1981): 634-641.
- Crum, William F. "Survey of Doctoral Programs in the United States," *The Accounting Review* (April 1978): 486-494.
- Crumbly, D. Larry. "Introducing Probabilities and Present Value Analysis into Taxation," *The Accounting Review* (January 1972): 173-174.
- Cyert, Richard M. and John T. Wheeler. "A Proposal for An Integrated Course in Statistics and Accounting" *The Accounting Review* (January 1960): 51-59.
- Daniels, Howard. "An Evolutionary 5-year Professional Program," *The Accounting Review* (July 1958): 455-460.
- De Reyna, II, Ramon Jose. "Accounting Achievement in Conventional and Television Classes at the University of Miami," *The Accounting Review* (October 1959): 651-663.
- Deakin III, Edward B. and Edward L. Summers. "A Survey of Curriculum Topics Relevant to the Practice of Management Accounting," *The Accounting Review* (April 1975): 380-383.
- DeCoster, Don and George Prater. "An Experimental Study of the Use of a Business Game in Elementary Accounting," *The Accounting Review* (January 1973): 137-142.
- Delaney, Patrick R., et. al. "An Admission Test for Intermediate Accounting," *The Accounting Review* (January 1979): 155-162.
- Dickerson, W. E. "Tax Planning and Tax Research in the Tax Accounting Courses," *The Accounting Review* (January 1957): 98-100.
- Dillon, Gladis J. "The Business Combination Process," *The Accounting Review* (April 1981): 395-399.
- Dixon, Robert L. "An Experimental Interview Program to Attract Students to Our Field," *The Accounting Review* (January 1970): 140-142.

- Doney, Lloyd D. "Integrating Accounting and Computerized Data Processing," *The Accounting Review* (April 1969): 400-408.
- Dunn, Clarence I. "Teaching of Adjusting and Reversing Entries in the Elementary Accounting Courses," *The Accounting Review* (January 1960): 135-137.
- Edwards, Edgar O. and L. Todd Johnson. "An Indifference Approach to Profit-Volume Analysis," *The Accounting Review* (July 1974): 579-583.
- Edwards, James B. "Should Accounting Students Write Computer Programs?" *The Accounting Review* (January 1973): 163-165.
- Eskew, Robert K. and Robert H. Faley. "Some Determinants of Student Performance in the First College-Level Financial Accounting Course," *The Accounting Review* (January 1988): 137-147.
- Faux, M. Charles. "A New Matrix Approach to Accounting Training," *The Accounting Review* (January 1966): 129-132.
- Fertig, Paul E. "Organization of An Accounting Program," *The Accounting Review* (April 1969): 190-197.
- Firmin, Peter A. "The Five-Year Accounting Program with Due and Deliberate Speed," *The Accounting Review* (October 1959): 591-602.
- Frakes, Albert H. and Michael F. Foran. "A Framework for Examining the Evaluative Function of Accounting Learning Activities," *The Accounting Review* (January 1978): 148-154.
- Frank, Werner G. "Solving Financial Planning Problems Using Input-Output Models," *The Accounting Review* (April 1974): 371-376.
- Friedman, Mark E. "The Effect on Achievement of Using the Computer as a Problem-Solving Tool in the Intermediate Accounting Course," *The Accounting Review* (June 1981): 137-143.
- Garner, Paul. "Professional Development of the Accounting Faculty Member," *The Accounting Review* (April 1957): 297-308.
- Garrison, Ray H. "Methodology of Lease Capitalization," *The Accounting Review* (October 1968): 782-783.
- Gleim, Everett B. "A Survey of Accounting in Junior Colleges," *The Accounting Review* (April 1966): 323-326.
- Gleim, Irvin N. and John B. Wallace, Jr., "Probabilistically Answered Examinations: A Field Test," *The Accounting Review* (April 1974): 363-365.
- Goetz, Billy E. "A Problem in Discounted Cash Flow," *The Accounting Review* (January 1971): 162-164.
- Goetz, Billy E. "Professional Obsolescence," *The Accounting Review* (January 1967): 53-61.
- Gosman, Martin L. "An Assessment of the Recommendations of the Study Group on Introductory Accounting," *The Accounting Review* (January 1973): 158-162.
- Green, Jr., David. "A Schema for Interest Formulae," *The Accounting Review* (October 1963): 833-834.
- Green, Jr., David. "The Direct Method of Preparing Consolidated Statements," *The Accounting Review* (January 1961): 129-137.
- Griffin, Charles H. "Co-operative Education for Business," *The Accounting Review* (October 1958): 664-669.
- Groomer, S. Michael. "An Experiment in Computer-Assisted Instruction for Introductory Accounting," *The Accounting Review* (October 1981): 934-941.
- Grossman, Steven D. and Robert H. Strawser. "Accounting and Behavioral Concepts: A Classroom Approach," *The Accounting Review* (April 1978): 495-500.
- Hartman, Maurice A. "A Simplified Solution to Cost or Market Problems," *The Accounting Review* (January 1966): 127-129.



- Haseman, Wilber G. "Accountants in Residency Program," *The Accounting Review* (July 1968): 585-588.
- Hirsch, A. Jay. "Dollar-Value and Retail LIDO: A Diagrammatic Approach," *The Accounting Review* (October 1969): 840-842.
- Hise, Richard T., Stanley H. Kratchman and Theodore H. Mattheiss. "The Public Practice of Accounting: An Experimental Program," *The Accounting Review* (January 1974): 153-156.
- Hobbs, James B. and D. R. Bainbridge. "Nonmonetary Exchange Transactions: Clarification of APB Opinion No. 29," *The Accounting Review* (January 1982): 171-175.
- Hobbs, James R. "Double-entry and Working Capital Analysis," *The Accounting Review* (October 1966): 763-766.
- Holmes, James D.J. "An Introductory Course in the Field of Electronic Data Processing," *The Accounting Review* (July 1959): 463-464.
- Hornburger, Richard H. "The Graduate Course in Accounting Theory—Seminar Style," *The Accounting Review* (July 1957): 485-487.
- Horngren, Charles T. "Teaching Methods and Participation as a Major Law of Learning," *The Accounting Review* (April 1963): 409-411.
- Howell, William C. and L. Todd Johnson. "An Evaluation of the Compressed-Course Format for Instruction in Accounting," *The Accounting Review* (April 1982): 403-413.
- Huefner, Ronald J. "An Economic Approach to Price-Index Bias," *The Accounting Review* (January 1972): 171-172.
- Ingram, Robert W. and Russell J. Petersen. "An Evaluation of AICPA Tests for Predicting the Performance of Accounting Majors," *The Accounting Review* (January 1987): 215-220.
- Jacobs, Fred A., A. L. Hartgraves and Larry H. Beard. "Publication Productivity of Doctoral Alumni: A Time-Adjusted Model," *The Accounting Review* (January 1986): 179-187.
- Jarnagin, Bill D. and John K. Harris. "Teaching with Multiple Choice Questions," *The Accounting Review* (October 1977): 930-934.
- Jennings, Robert M. "An Algebraic Model for working Capital," *The Accounting Review* (October 1966): 654-660.
- Johnson, Charles E. "A Course in Income Taxation for Non-Accounting Majors," *The Accounting Review* (January 1957): 93-94.
- Jones, Gardner M. "Accounting Innovation and the Psychology of Change," *The Accounting Review* (April 1962): 244-250.
- Jones, Goodrich M. "Educators, Electronics, and Business Models: A Problem in Synthesis," *The Accounting Review* (October 1960): 619-626.
- Kein, Leonard W. "The Course in Computers.—Is it Accounting? Mathematics? Engineering?" *The Accounting Review* (January 1959): 132-134.
- Keister, Orville R. "Consolidations and Intercompany Bond Holdings," *The Accounting Review* (April 1967): 375.
- Kemp, Patrick S. "A 'Current Topics' Course in the Accounting Curriculum?" *The Accounting Review* (April 1963): 398-400.
- Kida, Thomas E. and Ronald C. Manning. "Job Selection Criteria of Accounting PhD. Students and Faculty Members," *The Accounting Review* (April 1980): 491-500.
- Kinney, Jr., William R. "The Use of the Time-Shared Interactive Computer in Audit Education," *The Accounting Review* (July 1974): 590-594.
- Kinney, Jr., William R. "Empirical Accounting Research Design for PH.D. Students," *The Accounting Review* (April 1986): 338-342.

- Knechel, W. Robert and Doug Snowball. "Accounting Internships and Subsequent Academic Performance: An Empirical Study," *The Accounting Review* (October 1987): 799-807.
- Kublin, Milton. "Acceptability of a Professional School of Accountancy," *The Accounting Review*, (July 1965): 626-630.
- La Grone, Paul G. "The Use of Visual Aids in Elementary and Intermediate Accounting to Determine Their Practical Value in the Classroom," *The Accounting Review* (July 1960): 520-522.
- Langenderfer, Harold Q. and Ernest H. Wein. "Bringing Accounting Curricula Up-to-Date," *The Accounting Review* (July 1956): 423-430.
- Laughlin, Eugene J. and James W. Gentry and Carolyn A. May. "Comparison of Alternative Forms of Teaching Fundamentals of Accounting," *The Accounting Review* (April 1976): 347-351.
- Liao, Mawsen. "The Effect of Change Variation on Revenue and Cost Estimations for Breakeven Analysis," *The Accounting Review* (October 1976): 922-926.
- Lindbeck, Rudolph S. "Conventional Retail—Lower than Cost or Market," *The Accounting Review* (January 1966): 335-338.
- Madden, Donald L. "Bridging the Gap Between Business and Academic Environments," *The Accounting Review* (January 1970): 145-150.
- Malcolm, Robert E. "Decision Tables in Accounting," *The Accounting Review* (July 1966): 551-555.
- Malcom, Robert e. "A Not on the Effect of Product Aggregation in Determining Sales Variances," *The Accounting Review* (January 1978): 162-169.
- Mandel, B. J. "A Course in Statistical Sampling for Accountants, Auditors and Financial Managers," *The Accounting Review* (April 1963): 400-406.
- Manes, Rene P. "Birch Paper Company Revisited: An Exercise in Transfer Pricing," *The Accounting Review* (July 1970): 565-572.
- Manes, Rene P. "In a Seminar on Budget Mix Variances," *The Accounting Review* (October 1968): 784-786.
- Manes, Rene P. "Demand Elasticities: Supplements to Sales Budget Variance Reports," *The Accounting Review* (January 1983): 143-156.
- Markell, William and Wilfred A. Pimberton. "Programmed Instruction in Elementary Accounting—Is it Successful?" *The Accounting Review* (April 1972): 381-384.
- Matusiak, Louis W. "The Role of Educators in the American Institute's Professional Development Program," *The Accounting Review* (April 1960): 197-202.
- Maxwell, Arthur D. "Answering Examination Questions," *The Accounting Review* (July 1957): 636-645.
- McCormick, Jr., William. "Trends in Education for Auditors," *The Accounting Review* (October 1973): 801-803.
- McCosh, Andrew M.. "The Case Method of Accounting Instruction and Microwave Television," *The Accounting Review* (January 1972): 161-163.
- McCray, John H. "Present Value of an Annuity—A Formula Approach," *The Accounting Review* (October 1972): 824-825.
- McGowen, George B. "The Flow of Assets Through A Business Enterprise and the Accounting Flow Equation Based Thereon," *The Accounting Review* (January 1962): 105-110.
- McKeown, James C. "Computer-Assisted Instruction for Elementary Accounting," *The Accounting Review* (January 1976): 123-130.

- McNeill, I. Eugene and Frank Collins. "Personality Tendencies and Learning Modes in Elementary Accounting," *The Accounting Review* (October 1975): 888-896.
- Mehl, Arthur G. and Lucille E. Lammers. "A Report and Analysis of the Accountancy Faculty Recruiting Surveys of 1975-1978," *The Accounting Review* (July 1979): 609-617.
- Mikesell, R. M. "Statement of Source and Application of Funds Without Formal Working Papers," *The Accounting Review* (April 1959): 300-301.
- Mock, Theodore J. "A Decision Tree Approach to the Methodological Decision Process," *The Accounting Review* (October 1972): 826-829.
- Murphy, G. J. "Algebraic Double Entry," *The Accounting Review* (April 1970): 780-782.
- Nash, John F. "A Note on Cost-Volume-Point Analysis and Price Elasticity," *The Accounting Review* (April 1975): 384-386.
- Needles, Jr., Belverd E. "Freedom and Learning: An Approach and First Results," *The Accounting Review* (January 1973): 143-147.
- Neilsen, Gordon L. "The Computer in Accounting Education," *The Accounting Review* (October 1968): 871-876.
- North, Robert O. "Relation Between Scores on the AIA Elementary and Advanced Accounting Achievement Tests," *The Accounting Review* (October 1956): 121-124.
- Nurnberg, Hugo and Corwin Grube. "Alternative Methods of Accounting for Business Combinations," *The Accounting Review* (October 1970): 783-788.
- Nye, Paul E. "Training for an Accounting Career," *The Accounting Review* (April 1958): 187-192.
- Paretta, Robert L. and Lester W. Chadwick. "The Sequencing of Examination Questions and Its Effects on Student Performance," *The Accounting Review* (July 1975): 595-600.
- Parker, William M. "Upgrading the Elementary Accounting Course," *The Accounting Review* (April 1965): 452-453.
- Patillo, James W. "Rating Student Performance," *The Accounting Review* (July 1966): 533-538.
- Patrick, A. W. "Burden Rates—Machine Hours Versus Direct Labor Hours," *The Accounting Review* (October 1861): 645-647.
- Patten, Ronald J. and Lawrence L. Steinmetz, "What Do Students Think of Your Elementary Course?" *The Accounting Review* (October 1966): 767-772.
- Patton, James M. Ratio Analysis and Efficient Markets in Introductory Financial Accounting," *The Accounting Review* (July 1982): 627-630.
- Pawliczek, Ronald C. "The Effect of Different Scoring Plans on Student Performance in an Elementary Accounting Course," *The Accounting Review* (July 1977): 721-726.
- Perritt, Roscoe D. "Innovations in an Elementary Accounting Program," *The Accounting Review* (July 1971): 589-590.
- Perry, Kenneth W. "Intercompany Profits and ARB 51," *The Accounting Review* (July 1973): 626-628.
- Perry, Kenneth W. and Lauren M. Walker. "Use of Visual Aids in the Teaching of Accounting," *The Accounting Review* (July 1957): 477-480.
- Pescow, Jerome D. "A Visual Approach to Auditing and Accounting Instruction," *The Accounting Review* (October 1963): 839-843.
- Powell, Ray M. "Career Choices Among Beta Alpha Psi Members," *The Accounting Review* (July 1966): 525-534.

- Price, Henry R. "Qualifications for College Accounting Teachers," *The Accounting Review* (January 1957): 83-89.
- Prickett, "The Master's Degree with Courses in Business, Yesterday, Today, and Tomorrow," *The Accounting Review* (January 1958): 76-83.
- Raff, Michael C. "Exposing First-Semester Accounting Students to Accounting Periodicals," *The Accounting Review* (July 1971): 594-595.
- Ray, J. C. "Graphic Presentation of Audit Reports," *The Accounting Review* (January 1966): 134-138.
- Rayburn, Frank R. and E. H. Bonfield. "Schools of Accountancy: Attitudes and Attitude Structure," *The Accounting Review* (July 1978): 752-765.
- Reeve, James M. "The Five-Year Accounting Program as a Quality Signal," *The Accounting Review* (July 1983): 639-646.
- Reilly, Robert C. "Comparison of Results of AIA Achievement Test and ACE Psychological Examination," *The Accounting Review* (January 1958): 128-130.
- Renick, Jack G. "ADP Equipment as an Accounting Teaching Tool," *The Accounting Review* (July 1966): 549-550.
- Revsine, Lawrence. "A Capital Measurement Approach to Income Measurement," *The Accounting Review* (April 1981): 383-389.
- Revsine, Lawrence. "The Rationale Underlying the Functional Currency Choice," *The Accounting Review* (July 1984): 505-514.
- Robertson, Jack C. and Charles H. Smith. "Auditing and Professionalism at the Graduate Level," *The Accounting Review* (July 1973): 599-602.
- Roller, Julius and Thomas H. Williams. "Professional Schools of Accounting," *The Accounting Review* (April 1967): 349-355.
- Rosenfeld, Eugene and Ralph G. Ledley. "An Accounting Course for Majors and Non-Majors," *The Accounting Review* (January 1961): 125-128.
- Rushing, Reginald. "Adjusting Inventories for Consolidated Statements," *The Accounting Review* (April 1965): 458-459.
- Russell, James H. "Calculation vs. An Understanding of Net Operating Loss," *The Accounting Review* (January 1958): 120-123.
- Ruswinckel, John W. "CCTV Instruction: 1967," *The Accounting Review* (January 1967): 134-140.
- Sadler, Alton G. "The Accounting Teacher Turns to Electronic Data Processing," *The Accounting Review* (July 1958): 496-501.
- Sale, J. Timothy. "Using Computerized Budget Simulation Models as a Teaching Device," *The Accounting Review* (October 1972): 836-839.
- Schonefeld, Hanns-Martin and H. Peter Holtzer. "A Business Flow Chart and its Uses as a Teaching Aid," *The Accounting Review* (January 1962): 118-120.
- Schroeder, Joan Gagnon. "Systems and Electronic Data Processing Courses in the Accounting Curriculum," *The Accounting Review* (April 1972): 387-389.
- Seidler, Lee T. "International Accounting—The Ultimate Theory Course," *The Accounting Review* (October 1967): 775-781.
- Seiler, Robert E. and Wayne A. Label. "Impact of Curricular Changes Upon Professional Staff Training Efforts," *The Accounting Review* (October 1974): 854-858.
- Shank, John K. and Neil C. Churchill. "Variance Analysis: A Management-Oriented Approach," *The Accounting Review* (October 1977): 950-957.
- Sidebotham, Roy. "Comments on the Teacher Development Report," *The Accounting Review* (October 1968): 876-879.
- Simon, Harry. "Continuity in Consolidated Statement," *The Accounting Review* (October 1956): 652-662.

- Singer, Frank A. "A System Approach to Teaching the Accounting Process," *The Accounting Review* (April 1970): 640-645.
- Smith, Frank P. "Research and Faculty Development," *The Accounting Review* (July 1959): 349-355.
- Snudden, Leslie W. "A Different Approach to Fund-Flow Problems," *The Accounting Review* (October 1968): 880-882.
- Sommerfeld, Ray. "Teaching Taxes—An Assist." *The Accounting Review* (April 1965): 460.
- Spiller, Jr., Earl A. "Teaching Consolidated Income Statements—A New Approach," *The Accounting Review* (April 1966): 336-342.
- Stallman, James C. "A Simplified Graphical Display of Production and Sales Volume Effects on Absorption Costing Income," *The Accounting Review* (April 1979): 390-395.
- Stevens, Robert C. "A Motivation Program to Increase the Effectiveness of Accounting Courses," *The Accounting Review* (October 1956): 666-671.
- Stone, Willard E. "The Funds Statement As An Analysis Tool," *The Accounting Review* (January 1959): 127-130.
- Stone, Willard E. "Developments in Accounting Instruction," *The Accounting Review* (July 1961): 474-477.
- Stone, Willard. "Accounting Doctoral Programs in AACSB Colleges of Business Administration," *The Accounting Review* (January 1965): 190-195.
- Streuling, G. Fred and Gary L. Holstrum. "Teaching Machines Versus Lectures in Accounting Education: An Experiment," *The Accounting Review* (October 1972): 806-810.
- Tambrino, Paul A. "College Placement Accounting in High Schools," *The Accounting Review* (April 1968): 383.
- Thomas, Arthur L. "Use of Microcomputer Spreadsheet Software in Preparing and Grading Complex Accounting Problems," *The Accounting Review* (October 1983): 777-786.
- Thomas, Arthur L. "Estimating the Effective Interest Rate," *The Accounting Review* (July 1968): 589-591.
- Throckmorton, Jerry J. and John Talbott. "Computer-Supported Instruction in Financial Statement Analysis," *The Accounting Review* (January 1978): 186-191.
- Tidwell, Victor H. and Robert W. Wyndelts. "Graduate Tax Education in AACSB Schools: Where We Stand Today," *The Accounting Review* (October 1977): 963-970.
- Townsend, Lynn A. "A Career in Business Accounting," *The Accounting Review* (January 1967): 1-6.
- Vance, Clarence I. "Education for Public Accounting," *The Accounting Review* (October 1956): 573-580.
- Voorhis, Robert H. Van. "Should the Accounting Teacher Practice Accounting?" *The Accounting Review* (October 1956): 608-616.
- Vruwink, David R. and Janon R. Otto. "Evaluation of Teaching Techniques for Introductory Accounting Courses," *The Accounting Review* (April 1987): 402-406.
- Wasley, Robert S. "A Revitalized Accounting Curriculum," *The Accounting Review* (January 1963): 151-153.
- Weil, Roman L. "The Algorithm for Lower-of-Cost-or-Market Inventory Valuation: Mathematical Notation Makes It Easy," *The Accounting Review* (July 1973): 598-598.

- Weimer, Arthur M. and Herman C. Miller. "The Attraction and Selection of Accounting Teachers," *The Accounting Review* (July 1956): 407-410.
- Weiser, Herbert J. "Accounting Education—Present and Future," *The Accounting Review* (July 1966): 518-524.
- Whitney, William H. "Deferred Income Tax Liability," *The Accounting Review* (April 1958): 305-309.
- Wilkinson, Joseph W. "Designing a Computer-Based Information System: An 'Intermediate' Systems Course," *The Accounting Review* (October 1971): 797-798.
- Williams, Paul F. "A Descriptive Analysis of Authorship in *The Accounting Review*," *The Accounting Review* (April 1985): 300-313.
- Williams Doyle Z. "A Seminar on the Teaching of Accounting," *The Accounting Review*, (July 1966): 542-549.
- Williamson, Robert W. "Presenting Information Economics to Students," *The Accounting Review* (April 1982): 414-419.
- Windal, Floyd W. "Publishing for a Varied Public: An Empirical Study," *The Accounting Review* (July 1981): 653-658.
- Woodburne, Lloyd S. "An Evaluation of Faculty Services," *The Accounting Review* (April 1957): 235-238.
- Woolsey, Sam M. "Improving the Quality of Advanced Accounting Instruction," *The Accounting Review* (April 1959): 303-305.
- Yager, E. Ben. "An Aid in Explaining Funds Provided by Operations," *The Accounting Review*, (January 1963): 154-157.
- Zannetos, Elnon S. "Programmed Instruction and Computer Technology," *The Accounting Review* (July 1967): 566-571.
- Zeff, Stephen A. "Accounting Journals in Business School Libraries: A Survey," *The Accounting Review* (April 1968): 150-153.
- Zieha, Eugene L. "Computer-Generated Accounting Assignments," *The Accounting Review* (July 1974): 600-602.
- Zikmund, William, Ralph F. Catalanello and Steve M. Wegener. "The Accounting Student's Job-Rating Criteria: An Experiment," *The Accounting Review* (July 1977): 729-735.
- Zukowska, Wilhelmina H. "Essential Subject Matter for a One-Year Basic Accounting Course Offered to Non-Accounting Major," *The Accounting Review* (July 1961): 481-487.

#### *Issues in Accounting Education*

- Abraham. Elizabeth, Carol Loughrey, and Hugh Whalen. "Computerized Practice Set in Introductory Financial Accounting," *Issues in Accounting Education* (Spring 1987): 1-12.
- Anderson, Urton. "Selection of Instructional Strategies in the Presence of Related Prior Knowledge," *Issues in Accounting Education* (Spring 1990): 41-58.
- Ault, David E. and M. Robert Carver. "The Effect of Pedagogical Format on the Performance of MBA Students in Graduate-Level Accounting Courses," *Issues in Accounting Education* (Fall 1987): 161-172.
- Baker, Richard E., John R. Simon and Frank P. Bazeli. "An Assessment of the Learning Style Preferences of Accounting Majors," *Issues in Accounting Education* (Spring 1986): 1-12.
- Boer, Germain B. and Joshua Livnat, "Using Expert Systems to Teach Complex Accounting Issues," *Issues in Accounting Education* (Spring 1990): 108-119.

- Borthick, A. Faye and Ronald L. Clark. "Research on Computing in Accounting Education: Opportunities and Impediments," *Issues in Accounting Education* (Fall 1987): 173-192.
- Brown Jr., James and Thomas E. Balke. "Accounting Curriculum Comparison by Degree Program of Schools Intending to Seek AACSB Accreditation," *Issues in Accounting Education* (Spring 1983): 50-59.
- Publitz, Bruce and Robert Kee. "Measures of Research Productivity," *Issues in Accounting Education* (Spring 1984): 39-60.
- Bunn, Radie G. "The Professor's Home Office," *Issues in Accounting Education* (Fall 1986): 230-237.
- Campbell, David R. and Robert W. Williams. "Accreditation of Accounting Programs: Administrators' Perceptions of Proposed AACSB Standards," *Issues in Accounting Education* (Spring 1983): 60-70.
- Campbell, David R. and Robert G. Morgan. "Publication Activity of Promoted Accounting Faculty," *Issues in Accounting Education* (Spring 1987): 28-43.
- Cohen, Jeffrey R. and Laurie W. Pant. "Accounting Educators' Perceptions of Ethics in the Curriculum," *Issues in Accounting Education* (Spring 1989): 70-81.
- Collins, J. Stephen. "An Effective Method for Teaching the Statement of Changes in Financial Aposition," *Issues in Accounting Education* (Spring 1985): 145-156.
- Coombes, Robert J. and Peter H. Eddey. "Accounting Income: The Relationship between Capital Maintenance and Asset Measurement," *Issues in Accounting Education* (Spring 1986): 112-122.
- Davis, Charles J. "A Structured Approach to Preparation of the Statement of Changes in Financial Position," *Issues in Accounting Education* (Spring 1983): 79-89.
- Dillaway, Manson P. "A Tax-Planning Approach for Teaching Corporate Distributions," *Issues in Accounting Education* (Spring 1984): 111-120.
- Dugan, Michael T. and Christine V. Zavgren. "Bankruptcy Prediction Research: A Valuable Instructional Tool," *Issues in Accounting Education* (Spring 1988): 48-64.
- Elikai, Fara and Jack Baker. "Empirical Evidence on the Effectiveness of Quizzes as a Motivational Technique," *Issues in Accounting Education* (Fall 1988): 248-254.
- Fetters, Michael, John McKenzie and David Callaghan. "Does the Computer Hinder Accounting Education? An Analysis of Some Empirical Data," *Issues in Accounting Education* (Spring 1986): 76-85.
- Fuglister, Jayne and Richard J. Murdock. "Use of the Computer in Preparation of Multiple Choice Examinations: A Multiple Form Generating Program," *Issues in Accounting Education* (Spring 1988): 174-180.
- Gaffney, Mary Anne and Bill N. Schwartz. "Honors Programs in Accounting," *Issues in Accounting Education* (Spring 1988): 79-87.
- Govindarajan, Vijay and John K. Shank. "Profit Variance Analysis: A Strategic Focus," *Issues in Accounting Education* (Fall 1989): 396-410.
- Guinn, Robert E. "The Use of Microcomputers in the First Auditing Course," *Issues in Accounting Education* (Spring 1988): 88-95.
- Hagerman, Robert L. and Cynthia M. Hagerman. "Research Promotion Standards at Selected Accounting Programs," *Issues in Accounting Education* (Fall 1989): 265-279.

- Helme, Medhat A. "Integrating the Microcomputer Into Accounting Education—Approaches and Pitfalls," *Issues in Accounting Education* (Spring 1986): 102-111.
- Hicks, Donald W. and Frederick M. Richardson. "Predicting Early Success in Intermediate Accounting: The Influence of Entry Examination and GPA," *Issues in Accounting Education* (Spring 1984): 61-67.
- Hooper, Paul and John Page. "Measuring Teaching Effectiveness," *Issues in Accounting Education* (Spring 1986): 56-64.
- Ijiri, Yuji. "Accounting Matrices and Three-Dimensional Arrays," *Issues in Accounting Education* (Fall 1988): 270-285.
- Kapoor, M. Rai. "Accounting Students' Attributes and Performance: Some Empirical Evidence on General Education," *Issues in Accounting Education* (Spring 1988): 108-119.
- Ketz, J. Edward and James A. Largay III. "Teaching the 'Funds' Statement Under Alternative Valuation Methods," *Issues in Accounting Education* (Spring 1985): 87-96.
- Koch, Bruce S. and Stewart S. Karlinsky. "The Effect of Federal Income Tax Law Reading Complexity on Students' Task Performance," *Issues in Accounting Education* (Spring 1984): 98-110.
- Langenderfer, Harold Q. and Joanne W. Rockness. "Integrating Ethics into the Accounting Curriculum: Issues, Problems, and Solutions," *Issues in Accounting Education* (Spring 1989): 58-69.
- Lipe, Marlys Gascho. "Further Evidence on the Performance of Female Versus Male Accounting Students," *Issues in Accounting Education* (Spring 1989): 144-152.
- Martin, James R. "Integrating the Major Concepts and Techniques of Cost and Managerial Accounting: A Recommendation," *Issues in Accounting Education* (Spring 1987): 72-84.
- Milne, Ronald A. and Glenn A. Vent. "Publication Productivity: A Comparison of Accounting Faculty Members Promoted in 1981 and 1984," *Issues in Accounting Education* (Spring 1987): 94-102.
- Murphy, George J. "The Choice and Consequences of Generally Accepted Accounting Alternatives," *Issues in Accounting Education* (Fall 1987): 373-382.
- Mutchler, Jane F., Joanne H. Turner, and David D. Williams. "The performance of Female Versus Male Accounting Students," *Issues in Accounting Education* (Spring 1987): 103-111.
- Nurnberg, Hugo. "The Ambiguous High-Low Method," *Issues in Accounting Education* (Spring 1986): 143-147.
- Nurnberg, Hugo and Jan Sweeney. "The Effect of Fair Values and Historical Costs on Accounting for Business Combinations," *Issues in Accounting Education* (Fall 1989): 375-395.
- Ostrowski, Barbara A. "First-Time Accounting Faculty: The Job Search, Acceptance, and Support Process," *Issues in Accounting Education* (Spring 1986): 48-55.
- Parry, Jr., Robert W. "The Impact of Assigned Study Groups on Study Effort and Examination Performance," *Issues in Accounting Education* (Fall 1990): 222-239.
- Partington, G. H. "Teaching Process Costing," *Issues in Accounting Education* (Spring 1984): 75-80.
- Patten, Ronald J. and Doyle Z. Williams. "Invited Editorial: There's Trouble—Right Here in Our Accounting Programs: The Challenge to Accounting Educators," *Issues in Accounting Education* (Fall 1990): 175-179.



- Petersen, Russell J. and Richard Grimlund. "CADRAS: Computer Assisted Data Recording and Analysis," *Issues in Accounting Education* (Spring 1983): 146-151.
- Schadewald, Michael and Stephen Limberg. "Instructor-Provided Versus Student-Generated Explanations of Tax Rules: Effect on Recall," *Issues in Accounting Education* (Spring 1990): 30-40.
- Schroeder, Nicholas W. and Donald V. Saftner. "Accounting Faculty Promotion at Quality Institutions," *Issues in Accounting Education* (Fall 1989): 252-264.
- Schroeder, Nicholas W. "Previous Accounting Education and College-Level Accounting Exam Performance," *Issues in Accounting Education* (Spring 1986): 37-47.
- Schwartz, Bill N. and David E. Stout. "A Comparison of Practitioner and Educator Opinions on Tax Education Requirements for Undergraduate Accounting Majors," *Issues in Accounting Education* (Spring 1987): 112-126.
- Seifrick, John. "The Statement of Changes in Financial Position: Retain, Repeal, or Modify?" *Issues in Accounting Education* (Spring 1983): 71-78.
- Siegel, Philip H. "Auditor Performance and Educational Preparation: An Analysis," *Issues in Accounting Education* (Spring 1987): 127-140.
- Steinbart, Paul John. "A Comparison of Computer-Administered and Paper Questionnaires: Effects on Student Evaluations of Teaching Effectiveness," *Issues in Accounting Education* (Spring 1989): 120-125.
- Tyson, Thomas. "Grade Performance in Introductory Accounting Courses: Why Female Students Outperform Males," *Issues in Accounting Education* (Spring 1989): 153-158.
- Williams, Jan R. "Invited Editorial: Curriculum Innovation and 150-Hour Legislation: Friends or Foes?" *Issues in Accounting Education* (Spring 1990): 1-6.

*Journal of Accounting Education*

- Agami, Abdel. "The International Accounting Course State of the Art," *Journal of Accounting Education* (Fall 1983): 67-78.
- Anderson, John J. "Using the Statistical Analysis System as an Educational Audit Software System," *Journal of Accounting Education* (Spring 1985): 131-144.
- Armstrong, Mary Beth. "Moral Development and Accounting Education," *Journal of Accounting Education* (Spring 1987): 27-44.
- Baker, Richard E. , John R. Simon and Frank P. Bazeli. "Selecting Instructional Design for Introductory Accounting Based on the Experiential Learning Model," *Journal of Accounting Education* (Fall 1987): 207-226.
- Baldwin, Bruce A. and Thomas P. Howard. "Intertopical Sequencing of Examination Questions: An Empirical Evaluation," *Journal of Accounting Education* (Fall 1983): 89-96.
- Baldwin, Bruce A. "The Role of Difficulty and Discrimination in Constructing Multiple-Choice Examinations: With Guidelines for Practical Application," *Journal of Accounting Education* (Spring 1984): 19-38.
- Baldwin, Bruce A., et. al. "Repeating the First College-Level Accounting Course: Empirical Evidence From Four Institutions," *Journal of Accounting Education* (Spring 1989): 9-24.
- Bayer, Frieda A., Debra M. Hopkins, and Bethane Jo Pierce. "Integrating Tax and Financial Accounting Concepts Into the Partnership Accounting Curriculum," *Journal of Accounting Education* (Fall 1989): 195-216.

- Bean, Virginia L. and Jeanette N. Medewitz. "Computer Education: A Survey of Accounting Graduates," *Journal of Accounting Education* (Fall 1987): 243-258.
- Briner, Russell F., Diane T. Pearson and James E. Gauntt, Jr. "A Microcomputer Application for Attribute Sampling," *Journal of Accounting Education* (Spring 1987): 161-166.
- Brown, H. Donald and Richard C. Burke. "Accounting Education: A Learning-Styles Study of Professional-Technical and Future Adaptation Issues," *Journal of Accounting Education* (Fall 1987): 187-206.
- Buehlmann, David M. and Joseph V. Techavichit. "Factors Influencing Final Examination Performance in Large versus Small Sections of Accounting Principles," *Journal of Accounting Education* (Spring 1984): 127-136.
- Bush, Jr., James L. "A Peer Tutoring Program for Introductory Accounting Courses," *Journal of Accounting Education* (Fall 1985): 171-178.
- Cao, Le Thi and Phillip G. Buchanan. "The Integration of Behavioral Accounting in Graduate Accounting Curricula," *Journal of Accounting Education* (Fall 1985): 115-122.
- Cenker, William and Robert Bloom. "The Valuation of an Accounting Practice and Goodwill," *Journal of Accounting Education* (Fall 1990): 311-320.
- Cherry, Alan A. "The Introductory Financial Accounting Course: Its Role in the Curriculum for Accounting Majors," *Journal of Accounting Education* (Spring 1983): 71-82.
- Clark, Carolyn E. and Bill N. Schwartz. "Accounting Anxiety: An Experiment to Determine the Effects of an Intervention on Anxiety Levels and Achievement of Introductory Accounting Students," *Journal of Accounting Education* (Fall 1989): 149-170.
- Collier, Henry W. and William A. Mehrens. "Using Multiple Choice Test Items to Improve Classroom Testing of Professional Accounting Students," *Journal of Accounting Education* (Fall 1985): 41-52.
- Cormman, Eugene J. "A Writing Program for Accounting Courses," *Journal of Accounting Education* (Fall 1986): 85-96.
- Crockett, James R. and Thomas E. McKee. "A Graphical Approach to Teaching the Relationship Between the Evaluation of Internal Accounting Controls and Substantive Audit Testing," *Journal of Accounting Education* (Spring 1988): 123-130.
- Crosby, Linda Garfield. "Experiences with the Personalized System of Instruction (PSI) to Teach Elementary Accounting," *Journal of Accounting Education* (Spring 1984): 139-144.
- Czyzewski, Alan B. and Harry D. Dickinson. "Factors Leading to the Rejection of Accountants' Manuscripts," *Journal of Accounting Education* (Spring 1990): 93-104.
- Dickens, Thomas L. and Robert M. Harper, Jr. "The Use of Microcomputers in Intermediate Accounting: Effects on Student Achievement and Attitudes," *Journal of Accounting Education* (Spring 1986): 127-146.
- Egenolf, Robert V. and Fred Nordhauser. "Public Sector Accounting in the Public Administration Curriculum," *Journal of Accounting Education* (Fall 1985): 123-130.
- Engle, Terry J. and G. W. Joseph. "A Successful Approach to Integrating Computer Assignments Into Accounting Information Systems Courses in a Manner That Complements Theoretical Readings and Classroom Discussions," *Journal of Accounting Education* (Fall 1986): 141-146.

- Fellows, James and James Spence. "Efficiency in Academe: Comparative Advantage vs. 'Publish or Perish,'" *Journal of Accounting Education* (Fall 1985): 53-60.
- Fetters, Michael L., James Hoopes, and Martin Tropp. "Integrating Concepts From Accounting, American History and English Literature: A Cluster Course Approach," *Journal of Accounting Education* (Spring 1989): 69-82.
- Flesher, Tonya K. and Joyce A. Rescho. "Tax Concepts and Their Importance in the Undergraduate Curriculum," *Journal of Accounting Education* (Spring 1986): 55-68.
- Frakes, Albert H. and William C. Lathen. "A Comparison of Multiple-Choice and Problem Examinations in Introductory Financial Accounting," *Journal of Accounting Education* (Spring 1985): 81-90.
- Gamble, George O. and Brian O'Doherty. "How Accounting Academicians Can Use Citation Indexing and Analysis for Research," *Journal of Accounting Education* (Fall 1985): 123-144.
- Groff, James E. "Using A Simple Game to Introduce Accounting Students to Certain Internal Control Concepts," *Journal of Accounting Education* (Fall 1989): 263-270.
- Gruber, Robert A. "Sequencing Exam Questions Relative to Topic Presentation," *Journal of Accounting Education* (Spring 1987): 77-86.
- Heck, J. Louis and Jiunn C. Huang. "Contributions to Accounting Literature: A Peer Assessment of Monographs," *Journal of Accounting Education* (Fall 1986): 27-36.
- Hirsch, Jr., Maurice L. and Janet Duthie Collins. "An Integrated Approach to Communication Skills in an Accounting Curriculum," *Journal of Accounting Education* (Spring 1988): 15-32.
- Holmen, Jay, Dennis Knutson, and Dennis Shanholtzer. "A Cash Flow Cost-Volume-Profit Model," *Journal of Accounting Education* (Fall 1990): 263-270.
- Howard, Thomas P. "Teaching Ideas for the Commencement of the Governmental Accounting Course," *Journal of Accounting Education* (Fall 1985): 179-186.
- Izard, C. Douglass and James M. Reeve. "Electronic Spreadsheet Technology in the Teaching of Accounting and Taxation—Uses, Limitations, and Examples," *Journal of Accounting Education* (Spring 1986): 161-176.
- Joy, Arthur C. "The Descriptive Case Project for Accounting Information Systems Courses," *Journal of Accounting Education* (Spring 1987): 145-148.
- Kalbers, Lawrence P. "Electronic Spreadsheets: Powerful and Flexible Educational Tools," *Journal of Accounting Education* (Fall 1984): 163-168.
- Keys, David E. and James A. Hendricks. "The Ethics of Accounting Research," *Journal of Accounting Education* (Fall 1984): 77-88.
- Lehman, Mark W. and Donna L. Street. "A Taxonomy of Content and Citations in the *Journal of Accounting Education* (1983-1989)," *Journal of Accounting Education* (Spring 1990): 63-76.
- Lehman, Mark W. and Carol M. Lehman. "Interactive Spreadsheet Models Reinforce Accounting Principles," *Journal of Accounting Education* (Spring 1988): 131-138.
- May, Gordon S. and Claire Arevalo. "Integrating Effective Writing Skills in the Accounting Curriculum," *Journal of Accounting Education* (Spring 1983): 119-126.

- McKeon, Jr. and William N. Bockanic. "Integration of Law With Accounting: A More Comprehensive Learning Experience," *Journal of Accounting Education* (Fall 1984): 127-142.
- Mecimore, Charles D. and Robert G. Morgan. "Flowcharting: An Effective Teaching Tool," *Journal of Accounting Education* (Fall 1983): 163-168.
- Mitchell, Falconer. "High School Accounting and Student Performance in the First Level University Accounting Course: A UK Study," *Journal of Accounting Education* (Fall 1988): 279-292.
- Neyhart, Jr., Charles A. and A. Eugene Abrassart. "A Scoring Rule for Probabilistic Multiple-Choice Tests," *Journal of Accounting Education* (Spring 1984): 71-82.
- Novin, Adel M., Michael A. Pearson, and Stephen V. Senge. "Improving the Curriculum for Aspiring Management Accountants: The Practitioner's Point of View," *Journal of Accounting Education* (Fall 1990): 207-224.
- Ott, Richard L., M. Herschel Mann, and Charles T. Moores. "An Empirical Investigation Into the Interactive Effects of Student Personality Traits and Method of Instruction (Lecture or CAI) on Student Performance in Elementary Accounting," *Journal of Accounting Education* (Spring 1990): 17-36.
- Park, Hai G. and Bart P. Hartman. "An Application of Opportunity Cost for a Short-Run Pricing Decision," *Journal of Accounting Education* (Fall 1987): 307-314.
- Reckers, Philip M. J. "Exploring the Role of Learning Style Research in Accounting Education Policy," *Journal of Accounting Education* (Fall 1984): 63-76.
- Reed, Ronald O. "An Alternative Approach to Determining Present and Future Value Interest Factors for Annuities Due," *Journal of Accounting Education* (Fall 1988): 339-344.
- Rouse, Robert W. and Randolph A. Shockley. "Setting Realistic Expectations for Publishing in Leading Accounting Research Journals," *Journal of Accounting Education* (Fall 1984): 43-52.
- Saftner, Donald V. "The Promotion of Academic Accountants," *Journal of Accounting Education* (Spring 1988): 55-66.
- Schwartz, Bill. "An Investigation of Publications in Accounting Journals 1970-1982," *Journal of Accounting Education* (Fall 1984): 97-110.
- Scribner, Edmund, and Manson P. Dillaway. "Strengthening the Ethics Content of Accounting Courses," *Journal of Accounting Education* (Spring 1989): 41-56.
- Seville, Mary Alice and Dahli Gray. "Using the Standard-Setting Process to Demystify the Concepts Statements: The Case of SFAS 76," *Journal of Accounting Education* (Fall 1986): 107-112.
- Sherman, W. Richard. "Internationalizing the Accounting Curriculum," *Journal of Accounting Education* (Fall 1987): 259-276.
- Singleton, W. Ron. "Applications of Computer-Assisted Tax Research in Academic Tax Programs," *Journal of Accounting Education* (Fall 1987): 287-296.
- Smith, Nancy E. "FASB's Conceptual Framework: Is it Being Taught?" *Journal of Accounting Education* (Fall 1988): 261-278.
- Stern, Myles. "Computer Conferencing for Accounting Instruction," *Journal of Accounting Education* (Spring 1985): 69-80.
- Stout, David E. and E. H. Bonfield. "Experimental Evidence on the Relationship Between Class Meeting Time Compression and Accounting Student Performance, Evaluations and Drop-out Experience," *Journal of Accounting Education* (Fall 1986): 51-62.

- Tondkar, Rasoul H. and Edward N. Coffman. "Teaching Foreign Currency Translation: A Flowchart Approach," *Journal of Accounting Education* (Fall 1984): 145-152.
- Vigeland, Robert L. "Instructional Usage of the Compustat Data Files," *Journal of Accounting Education* (Fall 1983): 123-134.
- Yardley, James A. "Explaining the Conditional Nature of the Audit Risk Model," *Journal of Accounting Education* (Spring 1989): 107-114.

*International Journal of Accounting Education and Research*

- Abdeen, Adnan M. and Ugur Yavas. "Current Status of Accounting Education in Saudi Arabia," *International Journal of Accounting Education and Research* (Spring 1985): 155-173.
- Abdel-magid, Moustafa F. and Joseph K. Cheung. "Ratio Scales, Foreign Exchange Rates, and The Problem of Foreign Currency Translation: An Analytical-Empirical Perspective," *International Journal of Accounting Education and Research* (Fall 1986): 33-50.
- Agami, Abdel M. and Yass A. Alkafaji. "Accounting Education in Selected Middle Eastern Countries," *International Journal of Accounting Education and Research* (Fall 1987): 145-168.
- Agrawal, Surendra P., et. al. "An International Comparison of Conceptual Frameworks of Accounting," *International Journal of Accounting Education and Research* (Fall 1989): 237-249.
- Ahmed, Sadrudin A. and Daniel Zèghal. "Industry Segment Identification and Social Responsibility Information Disclosure in Selected Canadian Companies," *International Journal of Accounting Education and Research* (Spring 1987): 153-168.
- Ainajjar, Fouad. "Standardization in Accounting Practices: A Comparative International Study," *International Journal of Accounting Education and Research* (Spring 1986): 161-172.
- Aitken, Michael J. "A General Theory of Financial Reporting: Is it Possible?" *International Journal of Accounting Education and Research* (Fall 1990): 221-233.
- Ameiss, Albert P. "International Accounting at the Senior Student Level," *International Journal of Accounting Education and Research* (Fall 1974): 107-121.
- Barley, Benzion and Abraham Friedman. "Experience Requirements and the Education of Certified Public Accountants," *International Journal of Accounting Education and Research* (Spring 1982): 75-99.
- Bloom, Robert and M. A. Naciri. "Accounting Standard Setting and Culture: A Comparative Analysis of the United States, Canada, England, Germany, Australia, New Zealand, Sweden, Japan and Switzerland," *International Journal of Accounting Education and Research* (Fall 1989): 70-97.
- Bomeli, Edward C. "Curricular Recognition of International Accounting—An Appraisal," *International Journal of Accounting Education and Research* (Fall 1969): 85-96.
- Bowles, C. C. "International Accounting\_A Challenge for Ingenuity," *International Journal of Accounting Education and Research* (Fall 1968): 83-97.
- Chu, Kuo-Chang. "Accountancy Education in the Republic of China," *International Journal of Accounting Education and Research* (Spring 1969): 75-91.
- Clay, Alvin A. "Undergraduate International Accounting Education," *International Journal of Accounting Education and Research* (Fall 1975): 187-192.

- Costouros, George J. "Accounting Education and Practice in Greece," *International Journal of Accounting Education and Research* (Fall 1975): 95-106.
- Dascher, Paul E., Charles H. Smith, and Robert H. Strawser. "Accounting Curriculum Implications of the Multinational Corporation," *International Journal of Accounting Education and Research* (Fall 1973): 81-97.
- Doupnik, Timothy S. "Evidence of International Harmonization of Financial Reporting," *International Journal of Accounting Education and Research* (Fall 1987): 47-68.
- Doupnik, Timothy S. and Robert J. Rolfe. "Geographic Area Disclosures and the Assessment of Foreign Investment Risk for Disclosure in Accounting Statement Notes," *International Journal of Accounting Education and Research* (Fall 1990): 252-266.
- Foo, See Liang. "Accounting Educational Systems in Southeast Asia: The Indonesian and Singaporean Experiences," *International Journal of Accounting Education and Research* (Spring 1988): 125-136.
- Foroughi, Tahirih and Barbara Reed. "A Survey of the Present and Desirable International Accounting Topics in Accounting Education," *International Journal of Accounting Education and Research* (Fall 1987): 69-82.
- Ghartey, Ato. "A New Perspective for Accountancy Education in Ghana," *International Journal of Accounting Education and Research* (Fall 1978): 121-132.
- Gray, H. Peter and Paul J. Miranti. "International Financial Statement Translation: The Problem of Real and Monetary Disturbances," *International Journal of Accounting Education and Research* (Spring 1988): 19-32.
- Hamer, John G. and Linda H. Kistler. "The Statement of Cash Flows—An Analysis of Translation and Remeasurement Techniques for Foreign Subsidiaries," *International Journal of Accounting Education and Research* (Fall 1990): 29-42.
- Heaston, Patrick H. "Qualification Requirements for Public Accounting in Selected Foreign Countries: A Comparison with the United States," *International Journal of Accounting Education and Research* (Fall 1984): 71-94.
- Hooper, Paul and Li-Min Liao. "Foreign Currency Accounting: A Review and Critique of Major Empirical Studies," *International Journal of Accounting Education and Research* (Spring 1990): 113-126.
- Hove, Mfandaizda R. "The Inappropriateness of International Accounting Standards in Less Developed Countries: The Case of International Accounting Standard Number 24 - Related Party Disclosures - Concerning Transfer Prices," *International Journal of Accounting Education and Research* (Spring 1989): 165-180.
- Juchau, Roger, Mick White, and Roger Hopkins. "Tertiary Education Strategies for Accounting in Developing Societies—The Southwest Pacific as a Case Study," *International Journal of Accounting Education and Research* (Spring 1986): 145-160.
- Kohler, Eric L. "Notes on Activity Accounting," *International Journal of Accounting Education and Research* (Spring 1967): 59-64.
- Kosiol, Erich E. "A Proposal for a General Concept of Cost," *International Journal of Accounting Education and Research* (Fall 1967): 1-19.
- Kubin, Konrad W. "The Changing Nature of International Accounting Courses," *International Journal of Accounting Education and Research* (Fall 1973): 99-111.
- Lebow, Marc I. and Rassoul H. Tondkar. "Accounting in the Soviet Union," *International Journal of Accounting Education and Research* (Fall 1986): 61-79.

- Lefebvre, Chris and Liang-Qi Lin. "Internationalization of Financial Accounting Standards in the Peoples' Republic of China," *International Journal of Accounting Education and Research* (Fall 1990): 170-183.
- Littleton, A. C. "The Significance of Interrelated Concepts in Accounting," *International Journal of Accounting Education and Research* (Fall 1966): 23-34.
- Markell, William. "Development of Accounting Education and the Accounting Profession in Third World Countries: Botswana," *International Journal of Accounting Education and Research* (Fall 1985): 99-105.
- Markell, William. "Accounting Education—Its Importance in Developing Countries: Israel—A Case Study," *International Journal of Accounting Education and Research* (Spring 1968): 125-133.
- Mautz, R. K. "The Direction of Accounting Education," *International Journal of Accounting Education and Research* (Spring 1967): 37-46.
- McKinnon, S. M. and Paul Janell. "The International Accounting Standards Committee: A Performance Evaluation," *International Journal of Accounting Education and Research* (Spring 1984): 19-34.
- Mintz, Steven M. "Internationalization of the Accounting Curriculum," *International Journal of Accounting Education and Research* (Fall 1980): 137-151.
- Ndubizu, Gordian A. "Accounting Standards and Economic Development: The Third World in Perspective," *International Journal of Accounting Education and Research* (Spring 1984): 181-196.
- Neumann, Frederick L. "Career Education in Accounting in the United States: A Current Appraisal," *International Journal of Accounting Education and Research* (Spring 1974): 169-179.
- Ninsuvannakul, Pianchai. "Education for Accountancy in Thailand," *International Journal of Accounting Education and Research* (Fall 1966): 77-114.
- Ogundele, Babatunde. "The Accounting Profession in Nigeria: An International Perspective," *International Journal of Accounting Education and Research* (Fall 1969): 101-106.
- Pratt, James and Giorgio Behr. "Environmental Factors, Transaction Costs, and External Reporting: A Cross-National Comparison," *International Journal of Accounting Education and Research* (Spring 1987): 1-14.
- Purcell, III, Thomas J. and James P. Scott. "An Analysis of the Feasibility of Harmonizing Financial reporting Practices Between Member Countries of the EEC and the OECD," *International Journal of Accounting Education and Research* (Spring 1986): 109-132.
- Rivera, Juan M. "The Internationalization of Accounting Standards: Past Problems and Current Prospects," *International Journal of Accounting Education and Research* (Fall 1989): 320-342.
- Rueschhoff, Morlin G. "International Accounting and Auditing in the U.S. CPA Examination," *International Journal of Accounting Education and Research* (Fall 1986): 25-32.
- Salas, Cesar A. "Accounting Education and Practice in Spanish Latin America," *International Journal of Accounting Education and Research* (Fall 1967): 67-85.
- Schoenfeld, Hanns-Martin. "International Influences on the Contemporary Accounting Curriculum: International Accounting Instruction at the University of Illinois at Urbana-Champaign," *International Journal of Accounting Education and Research* (Fall 1975): 71-85.
- Taylor, Martin E., Thomas G. Evans, and Arthur C. Joy. "The Impact of IASC Accounting Standards on Comparability and Consistency of International

Accounting Reporting Practices," *International Journal of Accounting Education and Research* (Fall 1986): 1-10.

Tondkar, Rasoul H., Ajay Adhikari and Edward N. Coffman. "The Internationalization of Equity Markets: Motivations for Foreign Corporate Listing and Filing and Listing Requirements of Five Major Stock Exchanges," *International Journal of Accounting Education and Research* (Fall 1989): 143-164.

Trotman, K. T. "An Evaluation of Accounting for Construction Contracts: An International Comparison," *International Journal of Accounting Education and Research* (Spring 1982) 151-166.

Violet, William J. "A Philosophical Perspective on the Development of International Accounting Standards," *International Journal of Accounting Education and Research* (Fall 1983a): 1-13.

Violet, William J. "The Development of International Accounting Standards: An Anthropological Perspective," *International Journal of Accounting Education and Research* (Spring 1983b): 1-11.

Wolk, Harry I. and Roger W. Briggs. "Accounting Research, Professors, and Practitioners: A Perspective," *International Journal of Accounting Education and Research* (Spring 1975): 47-56.



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## RETROSPECTIVE: PAUL FRANKLIN GRADY

*Abstract:* This paper, written by his son-in-law of 37 years, is a collection of anecdotal "folklore" about a man who had a very significant impact on the development of the accounting profession during the "Golden Age of Accounting". Paul Grady's greatness arose from his enormous dedication, strength and character, coupled with his complete honesty and relentless ruthlessness in seeking to have his views prevail.

The only purpose in the paper is to provide a glimpse of the nature of this truly remarkable person. If the paper fails in this, then perhaps the reader will at least find the stories mildly amusing.

Paul Franklin Peterson (sic) was born in a log cabin in Creal Springs, Illinois on May 19, 1900. He was born prematurely, weighing less than three pounds at birth, and was not expected to survive. Family tradition has it that, at birth, Paul was wrapped in a blanket and placed in a shoebox surrounded by heated bricks from the cabin fireplace. The heat from the bricks provided warmth and Paul did make it through that first night. Perhaps this was the initial indication of a fighting spirit and a will to overcome difficult situations that seems to characterize many highly successful persons of his era.

When Paul was five, his father, James Peterson, developed tuberculosis and, for reason of the elder Peterson's health, the family was compelled to move to Colorado in 1905. Later that year, James Peterson died and Paul, his mother and younger brother, Merrill, returned to southern Illinois, settling in the town of Marion. More than fifty years later, Paul first learned, as a result of an X-ray examination in connection with an application for life insurance, that he had, at an early age, also been the victim of tuberculosis. Apparently, although the trip had failed to cure the elder Peterson, Paul's undiagnosed case of the lung disease was unknowingly cured.

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The author would like to thank the following persons for their thoughtful comments on earlier drafts of this paper: Carol Grady Andrews, Professor Mary Harston, Professor Gary Previts, Professor Charles H. Smith.

On the return trip from Colorado, Paul's mother, Myrtle Powless Peterson, met J. J. Grady, whom she subsequently married. At the time of her second marriage, however, Paul's name was not changed to Grady; he made the change himself upon reaching the age of eighteen. His brother, Merrill Peterson, never changed his name.

While growing up in Marion, Paul was a good student, excelling in mathematics and the physical sciences. This latter was important in that there was a substantial amount of coal mining locally and Paul developed an interest in mining at an early age. This prompted him to apply to the University of Illinois in 1918, seeking a degree in Chemical Engineering. We may speculate that this early interest in science and geology created a common interest with Herbert Hoover, who later became not only Grady's close personal friend but also his idol. Further, this close association with Hoover is in part, at least, responsible for Paul's continuing support of the Republican party and his strong conservative positions on many issues throughout his life.

Two additional aspects of Paul Grady's high school years; one is that, even though he was a short man, he excelled in basketball, being captain of the Marion high school team. From this experience, we can see again that element of Paul's character that caused him to succeed, even though he was not physically well suited, in one of the few major sports in town at the time.

The second aspect of Paul's high school years was his love of Louese Trevor, a local beauty who was a cheerleader for Marion High. She also had a lovely singing voice. Paul and Louese planned to be married after his graduation from the University of Illinois, anticipated in 1922. In the meanwhile, Louese went to Chicago Music College for three years after high school, to further her interest in music.

In the later years of his life, Paul said "I've only been in three partnerships in my life; one with Arthur Andersen, one with Price Waterhouse and one with Louese Trevor." Of the three, the latter was clearly the most lasting; Paul and Louese remained married for sixty two years, until Paul's death in 1984.

Once at the University of Illinois, Paul found that there was not time enough to take the demanding physical science courses, with afternoon lab sections as well as morning lectures, and to hold down a full time job, which was necessary to sup-

port himself, his family back in Marion and to provide savings for his anticipated marriage. After his third year, Paul was forced to abandon his chosen work in Chemical Engineering, in order to have the afternoons available for work, leaving evenings for study. [In all the years that I knew Paul, I never heard him express disappointment at not completing his major in Chemical Engineering, but I suspect that it must have been a difficult choice for him to make.]

This allowed Paul to take a full time job, working afternoons and early evenings as a short order cook at Ostrand's, a family run delicatessen serving the college students of Champaign/Urbana. This arrangement worked well and, in fact, after two years, Mr. Ostrand offered a partnership share in the restaurant, an offer which Grady considered and rejected. He did, in later years, speculate on the implications of this decision on the course of his later life; I get the impression that he enjoyed being a short-order cook and often reminisced about the prospects of a quiet life catering to students at Urbana.

One further aspect of Paul's experience at Illinois was the beginning of his lifelong friendship with Andrew Barr, who later became Chief Accountant at the Securities and Exchange Commission.

Another lifelong friendship was with Ralph Johns, who was later associated with General Motors. The University became the beneficiary of this relationship in the early 1960's, when Paul served as Director of Research for the American Institute of Certified Public Accountant. The story goes that John Carey, then Executive Director of the Institute, called Paul upon the occasion of Paul's retirement from Price Waterhouse in 1960, offering the position of Director of Research of AICPA, which was vacant at the time. Paul, reluctant to take the offer at all, finally agreed to take the job for a period of one year only, spending the time writing Accounting Research Study No. 7, "Inventory of Generally Accepted Accounting Principles". Carey agreed to these terms and informed Paul that the annual salary for the position was \$125,000. Paul replied that he did not want the salary, but Carey insisted that the position would pay that amount of compensation, whether Paul wanted it or not. Paul called his friend Ralph Johns, saying that he had \$125,000 to "give to the University of Illinois, if you (Johns) would match the gift". Johns agreed and this money became the seminal contribution for the Center for Studies in International Accounting at the University of Illinois.

Upon graduation from the University of Illinois, Grady took a position with the relatively new firm of Arthur Andersen & Co., Chicago. He also passed (barely) the CPA exam in the state of Illinois. Regarding his experience with the CPA exam, he related to me that, when he had completed taking the exam, he went to his room to wash up and dress for dinner. While washing his face, he realized that he had not answered one of the questions on the exam, a cost accounting question for a coal mining operation. He said that he had read the question early in the exam session and had put the question aside to be solved later, because he felt very confident that he could answer the question easily, having previously worked as cost accountant for a coal mine. He then devoted a majority of the allotted time to what he considered to be the more challenging questions, completed his answers to these and turned in his work. Fortunately, his work on these other questions was of sufficient quality to garner a passing grade on the exam without the answer to the coal mining question; certainly, learning that he passed was a substantial relief to Paul. I believe that the foregoing story is the only known incidence of any admitted error by Paul Grady, at least to my knowledge.

While at Arthur Andersen in Chicago, Paul's career advanced rapidly. He traveled some in the early years and Louese traveled with him. He tells one story of spending a week in a small town in central Illinois, auditing the local bank. All during the week, both he and Louese noticed that the townspeople were avoiding them for some reason; they even crossed the street to avoid meeting them on the same sidewalk when they were out for an evening stroll. Finally, toward the end of the week, Paul inquired of the lady who ran the boarding house where they took their meals concerning the attitude of the townspeople. Her reply was that the people were very suspicious of "those strangers, particularly that fellow who sits all day at a desk in the front window of the bank, making those funny looking marks with a bunch of different colored pencils."

As Paul's career with Arthur Andersen proceeded, Arthur, Sr. placed more and more reliance in Paul's ability to get the job done. Paul was asked to go to New York in 1931, to help open a New York office for the firm. Paul did this and remained in New York until 1937, when he returned to the Chicago office.

At one point in the late 1930's, Arthur, Sr. took a trip of several months to Europe. During Arthur's absence, one of Grady's chores was to write an Audit Manual for the staff of the

firm. The task was completed and the manual was distributed to the staff prior to Arthur's return from Europe. Upon his return, Arthur reviewed the new document and objected strongly to the emphasis in the manual placed upon review of and reliance on the client's system of internal control. Apparently, Arthur believed in the more traditional balance sheet approach to auditing and withdrew the manual from circulation within the firm. This difference of opinion was one of many between Grady and Andersen and may have contributed to their eventual parting of the ways, which occurred in 1945.

For Grady's part, he was very active in the early development of the American Institute of (Certified Public) Accountants and worked to get the notion of reliance on the system of internal control adopted by the Committee on Auditing Procedure; an effort in which he was largely successful. He was fully in favor of the definition of internal control that prevailed in the accounting literature for some years; namely that internal control was comprised of three facets; *internal check*, which was designed to safeguard assets, *internal accounting controls*, those controls designed to "provide for the reliable and accurate recording of accounting data", and *internal administrative controls*, which were designed to "promote operational efficiency" and "provide for compliance with management's prescribed policies". Further, I know that Grady's personal view was that an auditor should be responsible, under Generally Accepted Auditing Standards, for reviewing all three aspects of internal control, even though a case can be made that *internal administrative controls* are not directly related to the reliability and accuracy of financial statements. He justified this belief by saying that the auditor is qualified and able to render services to audit clients beyond the narrow scope of what is required to reach an informed opinion on financial statements. While others of the time disagreed with Grady on this point, I feel that this view is the precursor of the now well recognized position of the profession in rendering a host of services to clients, beyond the normal audit service.

During the Second World War, Grady was asked by Secretary of the Navy James Forrestal to come to Washington to review and revise the Navy's Procurement and Cost System, a job which Grady considered to be his patriotic duty in time of war. He remained in Washington until 1945, when his work was completed and the War was drawing to a close. He indicated that, during the latter stages of the war, Arthur, Sr. had con-

tacted him regarding returning to Chicago to resume his position as an active partner in the firm's growing practice. Grady refused to do so, on grounds that the national interest in time of war required that he complete his work for the Navy Department. This disagreement with Arthur, Sr. perhaps was the last straw in a series of disagreements; at any rate, Arthur, Sr. asked Grady to either return to Chicago or resign his partnership. Grady, understanding that his partnership agreement with the firm contained a noncompeting clause for a period of ten years from his resignation, refused to resign. The disagreement finally became so serious that Arthur, Sr. agreed to fire Grady, thus making it possible for him to accept a partnership with another firm. Thus, after completing his assignment in the Navy Department, Grady accepted a partnership in the firm of Price Waterhouse, in the New York office.

I know that the break with the Andersen firm was a very trying time personally for Grady. According to Grady, Arthur, Sr. put a great deal of pressure on the other partners to force Grady's resignation. As a result, most of the partners were afraid to have any social contact with Grady during the final year or so of Grady's tenure with the firm. Both Paul and Louese related one instance where, while attending the theater, one of his partners who was also in the audience was afraid to speak to the Gradys in public, but, instead, covered his hand with his program as he waved his greeting to Paul.

Two other stories come to mind regarding Grady's post-Andersen years. First, I have often heard him express his high regard for James Forrestal and the work that he did at the Navy Department during World War II. Grady did feel, however, that, while the relationship between Forrestal and President Roosevelt was a good one, the same was not true regarding Forrestal's relationship with President Truman. Indeed, Grady expressed the belief that the attitude taken by the new, post-war President towards Forrestal probably contributed to Mr. Forrestal's decision to take his own life shortly after the conclusion of the war. While he did not express the nature of the "bad blood" between the two, I am sure that, in Grady's mind, Truman should have accepted some portion of the blame regarding Forrestal's demise.

The second story was related by Paul Grady to me in late 1983, perhaps early 1984, just months before his death. It seems that the management consulting firm of Booz, Allen, Hamilton was in the process of being formed about the same time that

Grady was considering his offer from Price Waterhouse. Apparently, Grady was approached by Booz (and/or perhaps Hamilton), asking him to accept a partnership in the new management consulting venture, the new firm to be called Booz, Grady and Hamilton. I know that Grady considered the offer seriously, but rejected it in favor of the Price Waterhouse option because "he felt a little afraid to take on the risks of a new venture (ie., the management consulting business) and preferred to stay in a professional environment where he felt comfortable". In retrospect, Grady expressed to me that "while he certainly could not fault his relationship with Price Waterhouse, I wonder how things would have turned out had I chosen to go into the consulting business."

On technical issues, there are several stories that he told that were, in my view, revealing. One has to do with how Accelerated Depreciation came to be a generally accepted accounting principle. According to Grady, the accounting profession was very interested in the changes taking place in the tax law in 1954, when Congress passed the Internal Revenue Code of 1954. According to Grady, he and other representatives of the AICPA who were working with members of the Congress on the legislation, felt strongly that the new tax law should reflect the impact of rising prices on the American taxpayer by giving a tax deduction for loss of purchasing power on money invested in securities of corporations when inflation occurred. The Committee would not agree to put this provision into the new law, so the accountants sought a compromise that allowed a deduction to corporations that had significant investments in fixed assets during times of inflation. The compromise was to allow faster than straight-line write-off of plant and equipment for tax purposes. Once accelerated methods of depreciation were acceptable for tax purposes, it only required a short time for these methods to become GAAP, presumably in order to reduce the number of book/tax differences that would otherwise be created.

While Grady did not necessarily agree with the methodology of FASB Statement No. 33 (he did not believe, for instance, that companies should recognize gains or losses on net monetary asset/liability positions), he did agree in general that companies needed some ability to reflect the impact of inflation financial statements. He also felt, I believe, that, once we instituted a rational method of accounting for inflation, we should probably not continue to allow Lifo and Accelerated Deprecia-

tion to be used concurrently.

Another story told by Grady deals with the history of accounting for deferred income tax. During the late 1940's and early 1950's, a substantial debate occurred over the issue of "clean vs. dirty surplus"; in other words, should all items that were not properly associated with the balance sheet be components of income? The "clean surplus" proponents believed that there were no such things as proper debits or credits to earned surplus (retained earnings); that all such items were elements of current net income, even though they were extraordinary or nonrecurring. The "dirty surplus" proponents held that income should be a measure of the recurring, usual earning capacity of the enterprise; therefore items of an unusual, nonrecurring nature should be taken directly to Stockholders' Equity ("Earned Surplus").

Sometime in 1983, Paul remarked "You know that Mr. May (George O. May) would have a fit if he realized what he started regarding all this deferred tax business . . . Some years ago, he wrote an article (I think in the *Journal of Accountancy*, but I'm not sure) on the clean/dirty surplus argument saying that he 'really didn't want to comment on the clean/dirty surplus argument but would urge that, whatever is decided as regards that issue, we should include a rule to require that, if an item is to be included in income, the related tax effect should also be included in income and, conversely, if a item is to go directly to earned surplus, then the related tax effect of that item should not be allowed to remain in income.'" [Parentheses mine.] Grady felt that this was indeed a simple idea that made plenty of good sense; he was simply amazed that that simple idea, according to Grady, was the beginnings of the entire deferred tax problem.

Although he never discussed the matter with me, I seem to remember reading in a history of Price Waterhouse that Grady had inferred in a personal interview with the historian that he had not been elected to the Executive Committee of that firm because he joined the firm late in his career, rather than "coming up through the ranks". The historian went on to suggest that, despite this, he was indeed a very powerful partner in the firm; further, the historian suggested that he maintained his position within the firm by never being argued down or proven wrong on any technical accounting or auditing point.

Indeed, within his family, Paul never, to my knowledge, admitted error (with the exception of the story, told above, about leaving out the mining cost accounting question on the CPA



exam). Family folklore in this regard includes the story that his wife, Louese, told, that "Paul has only made one mistake in his entire life. In 1951, he thought he had made a mistake but it later turned out that he didn't!!"

This "bulldog tenacity" was exhibited by Grady even after his retirement from Price Waterhouse at age 60. Paul spent eighteen months (roughly 1961 and half of 1962) completing Accounting Research Study No. 7, "Inventory of Generally Accepted Accounting Principles", then he and Louese moved from their home in Greenwich, Connecticut to Delray Beach, Florida. Upon establishing residence in Florida, Grady sought a reciprocal CPA certificate from the Florida Board of Certified Public Accountants but his application was rejected, along with that of his friend Percival F. Brundage, who was seeking reciprocity in Florida at the same time. Grady reported, in a rather indignant manner, that the Board had rejected his application because of lack of academic credit for a Freshman English course in Composition (Grady had "tested out" of the Freshman English requirement at the University of Illinois, so his transcript indeed did not show that he had taken the course). Further, Grady said that "Percy got rejected because his BA degree was not from a properly accredited university". (Brundage's undergraduate degree was apparently from Harvard University.)

This turn of events clearly did not suit Grady, but I did not hear much about the matter until, a year or two later, Paul announced that he was now a member of the Florida Board. It was also about this time in Florida's history when that state's "Blind Tiger" rule finally fell and large firms were allowed to practice in that state under their own names. I have no way of knowing if the two events (Paul's success in becoming certified in the State of Florida and the demise of the "Blind Tiger" rule) are related, but I have always somehow suspected that they almost simultaneous occurrence was somehow not coincidental. I do know, however, that Paul was eventually successful in his application for certification by reciprocity; I am not aware of the outcome of Mr. Brundage's application.

In summary, I now believe that the primary characteristic of Paul Grady's personality is this tenacity in pursuing those things that he believed were right, coupled with very thorough analysis of every situation to insure that he was right. (Indeed, family folklore aside, he really was almost never wrong, at least when it came to technical matters. This was the benchmark of his professional reputation.) Perhaps his classmates in the Se-

nior Class of 1918 at Marion Township High School came to appreciate this characteristic early in Paul's life. The quote which the editor of the school yearbook chose for Paul's Senior Class picture is "A decent boldness ever meets with friends." [*The Memory Kit*].

#### WORKS CITED

*The Memory Kit*, annual yearbook of the Class of 1918, Marion Township, Marion, IL.

## BOOK REVIEWS

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### REVIEWS OF BOOKS AND OTHER PUBLICATIONS

Margaret Hoskins, *Mary E. Murphy's Contributions to Accountancy* (New York: Garland Publishing, Inc., 1994, 374 pp., \$63).

Reviewed by  
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Margaret Hoskins' biography of Mary E. Murphy provides a comprehensive review of Murphy's contributions to accounting as both a profession and an area of academic interest. There is no doubt that Mary Murphy warrants such a biography. As Hoskins notes:

During her career, [she] published over 100 journal articles, authored or collaborated on at least twenty books, and wrote several book reviews. During the years 1946 through 1965 she published more articles in the *Accounting Review* than any other author. During the year 1926 through 1985 she was the fourth most published author in this journal exceeded only by A.C. Littleton, Harold Bierman, and Robert Mautz [p. 99].

In addition, Murphy was the first Fullbright Professor of Accounting. Her writings on international accounting and accounting history foreshadowed much of the work being done today. She recognized the important interactions between business organizations and their cultural, political, and legal environments, and she studied these interactions holistically. Not coincidentally, Murphy was also the first female CPA in Iowa, and when she completed her Ph.D. at the London School of Economics she became the second female Ph.D. in Accounting in the United States.

As with most biographies, it is just this characterization of Murphy as "unique" that creates the book's tension and interest. In addition to the inherent difficulty of understanding the contributions of individuals to history, Margaret Hoskins must deal

with the issues of gender and identity which raise inevitable questions about Murphy's life and contributions.

The question that most permeates this book concerns Murphy's relative obscurity as an accounting authority. Why do we know so little about one of the most published accounting scholars of this century? Furthermore, why did such a prolific researcher spend most of her career at California State University (then College), a relatively small and unknown school? Hoskins deals with these questions in several ways. First, she acknowledges the unequal status of women in both accounting and academia, and she explores the impact of these inequalities on Murphy's professional life. Hoskins notes that women were largely discouraged from becoming accountants during the first half of the century, and there were few University teaching positions for women outside women's colleges. The book includes explicitly biased comments from colleagues including one that begins "Whilst I personally share your preference for a man, Dr. Mary E. Murphy is no mean scholar" [p. 68]. There are also subtle reminders that men and women were judged by different standards. Murphy is described both by acquaintances and by the author as being "agreeable," "pleasing and charming," and as being "helpful" [p. 85]. One colleague wrote critically that "she tended to 'adopt' the accounting faculty both from a professional as well as a personal point of view" [p. 84]. One wonders if these terms would have been used to describe a male colleague, and whether these terms would have carried the same evaluative connotation for a man.

Hoskins also deals with Murphy's obscurity by attempting to carefully evaluate the substance of her writings. Hoskins quantifies the topics of Murphy's research and notes where each article was published. Each area of research is summarized and diagrammed. These efforts seem to be an attempt to objectively evaluate Murphy's work, and there is an anxiety that underlies this portion of the book. Hoskins wonders if Murphy's work was too repetitive, too speculative or too normative to garner much interest. Hoskins suggests that Murphy's lack of prominence may be due to her choice of research topics (education, international harmonization, and history) or perhaps because Murphy published in a wide variety of journals. It is as if Hoskins were trying to reassure herself that Murphy truly deserves more recognition for her work. Further, Hoskins seems to be trying to evaluate Murphy's work by current standards for accounting research. Surely the same concerns would apply to the work of

Littleton, Mautz and most of Murphy's contemporaries, many of whom did receive significant public recognition. It is doubtful whether Murphy's obscurity can be understood by comparing her writing to current definitions of research. If anything, reading this book reminds us that the criteria for accounting research narrowed considerably during the 1970s and 1980s, a narrowing that we have recently begun to lament.

Perhaps the most troubling tension in this book emerges from the author's somewhat limited attempt to link Mary Murphy's non-traditional professional and personal lives. Hoskins describes Murphy's personal history, but she never integrates these parts of Murphy's life into the analysis of Murphy's accounting contributions. In a way, Hoskins can not be blamed for this as historians have tended to separate the public and private experiences of historical subjects. However, feminist historians and others have long noted that this separation frequently leads to the exclusion of women from history. In addition to the gender, race and economic circumstances, the contributions and/or problems of family are omnipresent in the lives of historical subjects. Ignoring these factors creates the false image of independent and fully creative individuals whose accomplishments can be divorced from their historical context. On the other hand, this book illustrates the difficulties inherent in attempts to integrate the personal and professional. In several places colleagues describe Murphy as "not a run-of-the-mill person" [p.82]. Even her family described her as a "bit odd" [p. 57], and she was certainly non-traditional in many ways. She pursued an education when few women did. She left Iowa at a young age intending not to return and, in fact, rarely returned although she traveled all over the world. In other words, she choose to divorce herself from her family and her childhood home. We also know that Murphy never married and had no children. Instead she spent over half her life with Ruth Deiches who Murphy met while teaching at Hunter College. Murphy's relationship with Deiches may have been a reason for Murphy's move to Los Angeles. Deiches also traveled with Murphy "serving as her secretary" [p. 71], according to Hoskins. This relationship must have enabled Murphy to pursue research and teaching goals that a married woman with children—or even a woman alone—would have found difficult. At the same time, these arrangements may also have created difficulties for Murphy, especially in a fairly conservative area like accounting. These issues are not explored in much depth, and we are left to

speculate about the importance of these aspects of Murphy's life.

Margaret Hoskins' biography makes a significant contribution to the history of accounting thought by reminding us of the contributions of a whole age of accounting academics who were concerned about accounting scholarship in a broad sense. It also illustrates the power history has to force us to remember people and ideas that we have collectively forgotten.

G. H. Lawson, Ed., *Studies in Cash Flow Accounting and Analysis (Aspects of the Interface between Managerial Planning, Reporting and Control and External Performance Measurement)* (New York: Garland Publishing, Inc., 1992, 315 pp., \$63).

Reviewed by  
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The book is a collection of 14 papers that reflect a long-standing interest of Dr. Gerald Lawson in cash flow accounting/analysis (CFA) and provide insight into the development of the Statement of Cash Flows as it is currently presented. Since Dr. Lawson has taught at the University of Manchester in England, a number of his papers are written from an United Kingdom accounting methodology standpoint. Some of the papers do not stand alone, which makes the glossary of symbols included at the end of the book a helpful tool to refer to while reading the papers. The papers focus on the measurement of the creation of ownership value inherent in cash flow market value accounting and span a decade from 1981 to 1992. At the time Dr. Lawson began examining CFA, the U.K. Accounting Standards Committee (ASC) advocated a fund flow of the following form in SSAP 10:

### **Sources of Funds = Applications of Funds**

where sources came from operating activities, the sale of assets, loans raised, and equity shares issued. Applications of funds went towards assets acquired, taxes paid, loans repaid, and dividends paid. Dr. Lawson believed the above approach led to the "erroneous impression that funds generated from operations constitute part of a pool which, at management's discretion, can then be deployed in alternative uses including periodic working capital investment" [p. 274]. To correct for this perceived mud-

dying of the water, he proposed the following identity, which is a reorganization and reclassification of the information included in the fund flow statement:

$$\text{ENCF} = \text{LCF} + \text{SHCF}$$

where ENCF is entity cash flows, LCF is lender cash flows, and SHCF is shareholder cash flows. In this form, the user would be able to identify the source of funds as being generated by the entity or by investing/financing activities more readily. This basic identity formula is expanded on in several of the papers, with the most straightforward explanation being provided in Paper 8, "The Valuation of a Business as a Going Concern."

This reader recommends beginning with Paper 12, "Call for SSAP 10 Reform." This paper provides the motivation for the studies and cases included in the other 13 papers and helps make sense of some of the other papers. Also, any unfamiliarity with U.K. accounting standards is mitigated by reading the papers in the order outlined. The papers all focus on the use of Lawson's proposed cash flow identity that facilitates analysis of management decisions and corporate performance. The motivation is further clarified in Papers 9 and 10, each a case study of a firm that experienced financial difficulty in the late 1970s or the early 1980s. In Paper 9, "Was Woolworth Ailing," Dr. Lawson examines Woolworth's cash flows and concludes that entity generated cash flows did not cover dividend payments, lender's contributions did. This resulted in an increasing debt to equity ratio, which Lawson believes was the basis of Woolworth's difficulties. He speculates if CFA via the Lawson model had been employed by the firm, both management and shareholders would have realized dividends based on historical levels were not feasible, and that cash flows generated by operating activities were not sufficient to cover the dividends. Paper 10, "Why the Current UDS Takeover Bids Became Inevitable," presents the same type of analysis for a firm that did adjust dividends for reduced revenue. In it, Dr. Lawson concluded management altered dividend and debt policies with some skill, but provided adequate returns for lenders at the expense of shareholders.

After reading Papers 12, 9, 10, and 8 the reader will be better prepared for progressing through the other papers as presented. The Introduction provides the conceptual linkage between the papers. Papers 1 and 2, "Assessing Economic Performance and Corporate Financial Policies on a Cash-Flow Market Value Basis" and "Ownership Value Creation and the Evaluation

of Alternative Plans," the second co-written with H. Chong, delve deeper into the cash-flow identity relationship and explain Dr. Lawson's conviction that cash flows should be evaluated after-the-fact and included in the budgetary process. Paper 3, "Contract Costing and the Negotiation of Contract Prices" co-written with J. van den Berge, and Paper 4, "Pricing of Non-competitive Government Contract" co-written with R. C. Stapleton, examine the use of cash-flow accounting in preparing more accurate contracts. In Paper 4, the authors examine the use of net present value calculations in contract pricing, which they contend should play a part in contract preparation. This is related to CFA through the periodic cash flows generated by a contract.

Lawson includes a couple of application-based papers that can be used in the classroom. Although lacking a proper introduction, Paper 5, "Specifying a Mutiperiod, Computer-based Financial Model," is developed as a student assignment which requires the student to develop a multiperiod cash-flow budget. "Zones, Ltd.," Paper 7, is a case study that can be incorporated either into a lesson on cash-flow versus accrual-based accounting or into a lecture on break-even calculations. It compares traditional break-even analysis to break-even analysis that incorporates cash-flow timing into the traditional break-even model. The traditional model assumes all cash flows occur in the period under question, when in reality both cash inflows and outflows often have a built-in lag where the company is acting as either a credit grantor or taker.

Papers 8, 13, and 14 contain examples of how to apply Lawson's cash-flow identity model. Paper 8 addresses the importance of combining cash flow analysis with present value calculations and compares this to accrual-based valuation methods. He surmises that the cash flow approach more closely estimates the realizable value of a firm, in spite of the requirement that future cash flows be estimated. Paper 13, "Equity Values and Inflation: Dividends and Debt Financing," is a response to a study by Professor Basil Moore that professed to show that dividend shortfalls were the cause of the decline in UK equity values. The paper, which was co-written by A. W. Stark, provides theoretical evidence that the decline is due to declining cash flow performance. Paper 14, "Bankruptcy Prediction - An Investigation of Cash-Flow Based Models," co-written by A. Aziz and D. Emanuel, applies Lawson's cash flow based (CFB) identity to the bankruptcy model developed by Altman. The results provide evidence that the theory-based CFB model predicts bankruptcy



as well as or better than previous models.

In conclusion, the collection of papers included in this book provides an interesting background to one side of the controversy surrounding the development of the current cash-flow model. From a historical standpoint, they helped this reader understand why the previous flow model was inadequate.

Robert K. Mautz, *Financial Reporting for Nonprofit Organizations: A Fresh Look* (New York: Garland Publishing, Inc., 1994, 119 pp., \$35).

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The book *Financial Reporting for Nonprofit Organizations: A Fresh Look*, by Robert K. Mautz, is readable and provocative. It uses an interesting "intellectual exercise" to develop a set of proposed principles for financial reporting by nonprofit entities. While one may not agree with all of the book's propositions, it offers many points that deserve further consideration as we move forward with accounting principles and standards for nonprofit and governmental organizations.

The book begins by discussing the distinguishing characteristics of nonprofit organizations and describing an intellectual exercise that was used to explore the applicability of conventional accounting theory and practice to nonprofits. An unidentified team engaged in the intellectual exercise then develops a classification of nonprofit organizations, including governmental entities, and addresses several issues, including the nature of nonprofits and their involvement in profit-directed activities, and the audience and focus for nonprofit financial reporting.

Chapter 2 discusses current nonprofit financial reporting practice as embodied in the financial statements of two membership and one state government organization. The types of disclosure in each of the three sets of financial statements are discussed, but the financial statements themselves are not provided. One serious limitation of the work is the lack of charitable, educational or health care organization financial statements in the exercise. The chapter concludes [p. 37-38] with the overall impressions of the team:

— the variety of activities and financial reporting within the nonprofit class.

- the extent to which nonprofit entities engage in for profit activities.
- the complexity of fund accounting in the state government's financial statements.
- the freedom available in applying GAAP to nonprofit entities.
- the absence of a bottom line to indicate success or failure.
- the absence of any identifiable purpose of the reporting.
- confusion as to the anticipated readership of the reports.
- the apparent lack of interest in the differences between for profit and nonprofit entities.

Some team members appear to be experienced and sophisticated with respect to business accounting, but not with nonprofit accounting. A listing of the participants and their backgrounds would help the reader to better understand the findings, especially in light of their comments on the difficulty of understanding the nonprofit and governmental financial statements with which they were dealing [e.g., p. 36]. As it is, one is left guessing who was involved and what their backgrounds are.

Chapter 3 discusses several problems that the team felt made it inappropriate to apply accounting theory developed for business organizations to nonprofit entities. The key issues addressed [p. 39-40] are:

- The nature and importance of differences between business and nonprofit organizations.
- The applicability of conventional financial statement formats to nonprofit organizations.
- The applicability of conventional accounting concepts to nonprofit organizations.
- The feasibility of the fund emphasis for financial reporting purposes.
- The nature and importance of difference among nonprofit entities.

Chapter 4 presents and discusses alternative financial statements that the team developed for the three nonprofit organiza-

tions introduced in Chapter 2. This part of the exercise was undertaken to get the team members to think about and apply the theoretical considerations in a practical way. All three sets of alternative financial statements include multi-year budgets referred to as "Commitments," and none uses reporting by funds.

Chapter 5 summarizes the conclusions reached by the team members with respect to nonprofit accounting. They essentially dismiss at least parts of accrual accounting, although other parts appear to be retained. They see no need for financial fund reporting, although they do not propose to restrict its use as supplementary data to organization-wide general financial statements. They give the following advice [p. 103] with respect to how and how tightly financial reporting for nonprofits should be restricted:

No matter how small or uncomplicated a nonprofit may be, those who contribute to it have a right to know how their contributions are used. That is really all we are concerned with, financial reporting that gives those who contribute to nonprofits a fair reporting of what happened to their money and what is likely to happen to any additional contributions or taxes.

As long as that reporting is both complete and understandable, need we ask for anything more?

The book concludes with a set of proposed principles for financial reporting by nonprofit entities. These principles state that nonprofit organizations are sufficiently different from business organizations to require their own GAAP. The differences cited include the nature of equity, purpose, operations, performance measures, and relevant decision makers. It proposes that nonprofit financial reports useful to contributors or taxpayers should focus on questions [p. 110] such as:

- How much did the entity receive during the reporting period and from what sources?
- What did the entity do with what it received?
- How much does the entity have left?
- What are the entity's plans and commitments for the future?

Profit-directed activities are to be clearly separated from those undertaken for nonprofit purposes. Flexibility in reporting is also recommended, as long as the resulting reports reflect these requirements.

This exercise appears to have been conducted with financial statements prepared under the pre-FAS No. 116 and 117 non-profit accounting standards. It would be useful to replicate the exercise with financial statements prepared under the new standards. It seems likely that some of the concerns raised in this exercise were addressed in FAS 116 and 117, but that many others were not.

An important issue not addressed by this book is the growing competition between nonprofit and business entities, especially in the health care and higher education. It also does not mention the large number of nonprofit organizations that derive a significant amount of their resources from grants and contracts, an ambiguous type of resource inflow that can be difficult to categorize as nonprofit or profit-directed activity. The general difficulty of separating nonprofit and for-profit activities, which is of great interest because of the tax implications, is glossed over. The easy dismissal of accrual accounting is also problematic.

Perhaps the most important contribution of this book is its serious attempt to delineate the significant differences between nonprofit and business organizations, and the ensuing attempt to develop accounting approaches that reflect these important differences. Mautz [p. 4-5] questions whether FASB adequately considered these differences in the deliberations that resulted in FAS Nos. 116 and 117. The book certainly provides an interesting perspective on the role and makeup of financial statements for nonprofit organizations and poses an intriguing contrast to existing standards.

Grant U. Meyers and Erwin S. Koval, *Proud of the Past: 75 Years of Excellence Through Leadership 1919-1994*, (Montvale, NJ: Institute of Management Accountants, 1994, 143 pp., \$10 paper, \$15 hardcover).

Reviewed by  
Richard Vangermeersch  
University of Rhode Island

This book is a very good "company history" of the Institute of Management Accountants, 1919-1994. As a "company history," academics should not expect a heavily referenced work, although there are some references, nor a very critical look at the organization or its leadership, both volunteer and staff. A very

good "company history" does provide a base for academic researchers to add these historical dimensions.

A very good "company history" is written by authors who have done their homework. In this instance, the authors brought much to the plate. Grant U. Meyers was national president of the IMA in 1969-70 and has remained quite active since then as well. He joined the IMA in 1946 and was a national vice president in 1962-63. He was program chairman for the 1969 annual meeting. Erwin S. (Speed) Koval was a former editor of *Management Accounting* and a long-time, 27 years, IMA staff member. A very good "company history" is well documented and, at the same time, interesting to read. The documentation that is presented is: (1) original letter of invitation; (2) the attendees of the organizational meeting; (3) the opening address by J. Lee Nicholson at that meeting; (4) charter members; (5) advertisement about the formation in *Industrial Management*; (6) membership numbers by years; (7) former presidents; (8) chapter growth; (9) competition trophy winners; (10) excerpt from Long-Range Objectives Committee Report 1968; (11) CMA activity by year; (12) front page of first bulletin; and (13) Lybrand Awards to best authors. The book has a nice mix of photographs. The text is extremely well written.

Members of The Academy of Accounting Historians will probably be most interested in the people who founded the IMA [first, in 1919, the National Association of Cost Accountants (NACA) and then, in 1957 and until 1991, the National Association of Accountants (NAA) ]. The authors did an excellent job with the founding father, J. Lee Nicholson, and the first executive secretary, Stuart C. McCleod. In the 75th anniversary issue of *Management Accounting* (June 1994), Professor Dale Flesher added to that coverage of Nicholson and McCleod and also added two more people, Clinton H. Scovell and I. Wayne Keller. In that same issue, Professor Richard Vangermeersch provided an historical sketch of the organizational meeting. Both these pieces fit well with the book. The book lays a good base for academics to do more extensive work on such important historical figures as Eric A. Camman, William B. Castenholz, John R. Wildman, Thomas H. Sanders, Wyman P. Fiske, Charles A. Reitell, J. Brooks Heckert, R. Lee Brummet, Herbert C. Knortz, and Raymond P. Marple.

Some coverage is devoted in the book to the research publications of the IMA and also its journal. Much of the coverage was based on Professor Robert Jordan's doctoral dissertation at

the University of Mississippi on a citation analysis of IMA publications. In the opinion of the reviewer of this book, the IMA has an extremely rich heritage of research and of journal publications. This book helps make readers more aware of this heritage. Patrick L. Romano, past research director of the IMA, is concluding an annotated listing of about 230 IMA research publications which will further show this rich heritage. Academics will also be interested in the IMA's successful efforts in membership education and the Certified Management Accountant (CMA) examination.

This book should be "must reading" for those Academy members who are IMA members and/or who are involved in teaching courses in cost/management accounting. This book is a credit to its authors and to the IMA. Good show, Grant and Speed.

R.H. Parker and B.S. Yamey, Eds., *Accounting History: Some British Contributions* (New York: Oxford University Press Inc., 1994, 661 pp., \$72).

Reviewed by  
Jeremy Cripps  
Heidelberg College

This anthology confirms Cicero's assurance that history provides maturity because history is "the testimony of time, the lyric of truth, the embodiment of memory, the guide for life, and our audit of antiquity." Professors Parker and Yamey, in an extensive work, provide us with fascinating contributions to accounting scholarship as they help to celebrate the 500th anniversary of Pacioli's *Suma de Arithmetica* (1494). Successfully demonstrating the great variety of accounting history literature, the editors have brought together twenty-three stimulating papers by British academics. The material, mostly from the 1980s, combines chronology and theme, and the authors include "traditional," "new" and "mainstream" accounting historians. The collection, as entertaining as it is relevant to our present time of rapid accounting change, is highly recommended.

### The Testimony of Time

From ancient Egypt to modern Japan, the authors proffer evidence of simple ideas in accountancy which have had remarkable consequences. In the process they show us account-

ing's arrow of time (the direction of time in which order increases). Professors Parker and Yamey arrange these changes in the accounting profession in sequence, before and after Pacioli's ennobled text. Albeit arbitrary, *Accounting History* adopts eight classifications: the ancient world; before double entry; double entry; corporate accounting; local government accounting; cost and management accounting; accounting theory; and accounting in context. The book invites the attention of all accounting historians and wishes we would value each others' contributions. It is a fine invitation; we should not hesitate to accept.

### The Lyric of Truth

In the second century A.D., Aurelius Appianus set up many *phrontides* (separate entities) in the Fayum area of Egypt [p. 15]. Separate accounts were used "to measure the monetary profitability of each of these units of the estate." In his comprehensive review of these accounts, the managerial accounts of the Appianus estate, Professor Rathbone shows how they "counter the conventional picture" of rudimentary Graeco-Roman accounting [p. 16]. These monthly accounts may not record in full detail every operation and transaction which took place, "but they are a synthesis and distillation" [p. 33] which provided the Appianus family with "rigorous control of its costs of production" [p. 54]. Thus the adequacy of ancient accounting controls demonstrate they were appropriate to the available technology.

As Professor Macve shows, managerial accounts provided ancient businessmen useful subjective intelligence which was particularly appropriate to ancient patterns of economic activity [p. 84].

### The Embodiment of Memory

In the twelfth and thirteenth centuries, manorial accounts, from Canterbury, Winchester and Beaulieu [p. 93] are used by Professor Harvey to demonstrate that a set of written rules were generally accepted for the oral presentation and audit of periodic accounts. These charge and discharge accounts present "how mankind once coped with conditions that now seem impossibly adverse . . . when paper was still unknown or costly, coins were scarce and bad, and most men were illiterate" [p. 97]. Structured phases of these accounts demonstrate "continuing developments" [page 107] in detail and layout, as our predecessor accountants approached the development of their records

with open, flexible minds. Professor Postles, for example, documents the "comparing" of accounts from one manor to others [p. 121] and the employment of "incentives" [p. 148] to assess and improve the level of profit.

Coping with adverse conditions, managerial accountants maintained records on tallies and checker boards. The recording of numbers "by notches carved on suitable objects is of great antiquity and was virtually a universal practice" [p. 200] and Professor Baxter's history of the Tally and the Checker-Board includes, with detail, much high drama. The events of 1834 are but one example. On the morning of October 16, the Lords of the Treasury ordered most of the tallies ("which my Lords understand to be entirely useless") to be destroyed. By afternoon, according to *The Times*, "one of the most terrific conflagrations that has been witnessed for many years" set the Houses of Parliament ablaze. *Accounting History*, like the tally's end, provides us with exciting memories.

### The Guide for Life

Professor Yamey examines procedures to make closing entries which were made in Italy from 1300-1600. He provides us with a comprehensive context within which to place the extraordinary genius of Luca Pacioli. I particularly enjoyed this chapter for the way in which Professor Yamey adds interest and significant questions for our consideration of present day issues. He wonders "whether and how frequently, say, the Medici or Datini had analytical summaries or abstracts compiled" [page 259] and examined them. Our students no doubt wonder about the time spent by users on financial statements today.

### Our Audit of Antiquity

To "the Scottish Enlightenment," [p. 268] where, as in the Renaissance, we find major developments in accounting with a roll call of luminaries, Adam Smith, David Hume, Sir Walter Scott, Robert Burns, and the accountants, Alexander Malcolm, John Mair, William Gordon and Robert Hamilton. Professor Mephram shows how they are a "complementary" part of that "general intellectual ferment" [p. 284] and recognizes these able accounting academics for the profound influence they exerted throughout the English speaking world. Professor Forrester, with equal precision, shows how, when and why for certain eighteenth and nineteenth century incorporated companies [p.



297]. Early canal company accounts provide primary evidence of the keeping of unprecedented details of expenditures to enable supervision to be exercised over expanding operations. Audit is a frequent and continuing responsibility. Professor Glynn documents the expansion of audit [p.333] as public interest and private interests inevitably conflict, require regulation, and, with the expansion of the railways, require the interests of the public to be taken into account. Professors Edwards and Newell examine "a largely unexplored area of business history" [p. 407], the application of accounting techniques in business management, particularly during the most innovative periods of the Industrial Revolution. Recent evidence in this field demonstrate "that fully integrated cost and financial accounting systems were in operation at the Charlton Cotton Mills (1810) and Lyman Mill (1854)" [p. 409]. Management accounting, particularly for the purposes of strategic planning, is also found several centuries before at Ashdown Forest (1539) and at the Worshipful Company of Bakers (1620) [p. 415]. New findings of ancient records are coming to light as forgotten archives are being recorded for library computer projects, providing primary evidence for new research.

Into the nineteenth century, and Professor Marriner recalls Winston Churchill's description of operations at the Ministry of Munitions. "An extraordinary improvisation beyond precedent without parallel in any country in the world took place in our industrial system" [p.450]. This seems to me an appropriate audit report on *Accounting History: Some British Contributions*. Yet I still want to mention Robert Loder, Jacobean management accountant, important social challenges to accounting, the evolution of financial reporting in Japan, and more.

Here is a history of many of the frequent small developments of accounting techniques, by authors too often unknown, which provide our profession benchmarks of progress, feathers on our arrow of time. The case for historical perspective is never better made than in this book.

#### REFERENCE

- Cicero, "Pro A. Licinio Archia" 16, 15, in *Orationes*, Vol. 2, London: A. J. Valpy, 1830.

Chris Poullaos, *Making the Australian Chartered Accountant* (New York: Garland Publishing, Inc., 1994, 352 pp., \$63).

Reviewed by  
Moyra J. Kedsle  
University of Hull

Between 1885 and 1897, six accounting institutes were formed in Australasia, in Adelaide, later South Australia, Victoria, Queensland, Sydney, Tasmania and New Zealand [Brown, pp. 259-261]. The British Society of Incorporated Accountants, endeavoring to pursue an "Empire" policy, in 1886, attempted to become the catalyst for a unified Australian profession but failed in this [Garrett, p. 14]. Several British accountants had emigrated to Australasia and this, combined with the amount of British capital invested in this part of the world, meant that the issue of professional amalgamation was of interest to Britain.

The journey from the formation of individual bodies to that of the Institute of Chartered Accountants of Australia was one plagued by conflict, politics and self-interest. It is not too difficult to accept the desire of Britain to control Australia when it was a colony, but the birth of the Commonwealth of Australia in 1901 did little to change this paternalistic view. Conflict was also quick to emerge between the six accounting institutes although they agreed in principle, in 1901, that the formation of an Australasian institute was desirable [p. 68]. Entwined with the Australasian institutional objective were the efforts to obtain a Royal Charter which were not successful until 1928.

Self-interest was evident in several arenas. First, the Institute of Chartered Accountants in England and Wales (ICAEW) was anxious to ensure that opportunities for its members overseas would not be eroded by the existence of an Australasian institute. They commented on the amount of British capital invested in the colonies and on the necessity to export British accountants to ensure its proper stewardship [*History of the ICAEW*, p. 52]. Although the ICAEW was happy to encourage its members to follow British capital to the colonies, it was not happy at the prospect of Australasian accountants invading Britain and employed many of the same arguments that they had employed against the movement of Scottish chartered accountants to London [ibid pp. 124, 125].

Within Australasia, there was dissent between members in public practice and other accountants. This had been dealt with

in the UK by excluding from institutional membership all but those in public practice, but exclusion was not a solution that endeared itself to the freedom of the colonies. In addition there was the difficulty of agreeing on a location for the headquarters of a national institute which was exacerbated by the sheer size of Australia and by the desire of each of the institutes to be the focus of activity.

As with other similar moves, the political dimension was also important as were the individuals who played significant roles in the various merger and charter attempts. It is difficult, with hindsight, to understand why some of these individuals become so involved, for such a long period of time, in issues which were of little interest to the general population, but without whom the Australian accounting profession might have been somewhat different. Yarwood appears to have played a significant role over many years. McLachlan entered the arena at a later stage but was also important in sensitive merger negotiations. Others such as H. B. Allard and Howden are revealed as consistently pushing for amalgamation (Appendix 1).

What makes this book different from more traditional historical expositions is the explanation, in Chapter 2, of its theoretical and methodological base which is largely dependent on D. H. Porters' *The Emergence of the Past: A Theory of Historical Explanation* [p. 341]. This is returned to in Chapter 8 which attempts to form the link that takes the reader back to the beginning. The theoretical chapter is one that is unlikely to appeal to the nonacademic reader who should be encouraged to begin at Chapter 3 where "the story" takes off. In the best academic tradition, Poullaos poses more questions than he answers and leaves himself, or others, plenty of scope for further research [pp. 302-305].

This is an extremely well researched book and one that will be of enormous assistance to teachers of accounting history, and their students, for many years. It is probably best read with a copy of the abbreviations in hand to ensure that the reader does not become lost in the multiplicity. Certainly not bed-time reading but well worth persevering with.

#### REFERENCES

- Brown, R., ed., *History of Accounting and Accountants*, Edinburgh: T. C. & E. C. Jack (1905).
- Garrett, A. A., *History of the Society of Incorporated Accountants 1885-1957*, Oxford University Press (1961).

*History of the Institute of Chartered Accountants in England and Wales 1880-1965 and of its Founder Accountancy Bodies 1870-1880*, London: Heinemann, (1966).

Joyce M. Szabo, *Howling Wolf and the History of Ledger Art*, (Albuquerque: University of New Mexico Press, 1994, 270 pp., \$50.00)

Reviewed by  
Basil S. Yamey

The London School of Economics and Political Science

At the right, an Indian warrior has arrived. He has dismounted from his horse and has a pistol in his hand. At the left, he is seen attacking a person lying on a bed.

What has this to do with accounting or accounting history? The only link, and a tenuous one it is, is that what I have described is the subject matter of a painting made on a page of an account book, the ruled lines in this example helping to unify the two successive scenes. The painting was the production of a Southern Cheyenne artist called Howling Wolf, and was made around the middle or the nineteenth century. It is shown as one of 32 color plates in Professor Szabo's delightfully illustrated book, which also contains 77 black-and-white reproductions.

Professor Szabo explains how it came about that in the nineteenth century artistically inclined Plains Indians began to paint or draw on the pages of account books. They also used other available sheets of paper, such as those of ruled exercise books. Works of art of this kind have come to be known as "ledger art." She traces the history of ledger art in detail, and concentrates in the second half on the work of Howling Wolf, perhaps the most remarkable of the artists. The author shows how ledger art, in terms of style and subject-matter, developed from traditional artistic work executed mainly on hides. She shows also how themes and treatment came to be modified partly because of the nature of the material used but mainly because of changes in the social and economic milieu in which artists and their fellow tribesmen lived and worked. She also stresses the artistic personalities of the leading practitioners of ledger art.

I enjoyed the book and its illustrations, and strongly recommend it.

Howling Wolf and the other ledger artists were not the first to produce works of art on account book pages. For example,

Rembrandt and Guercino, working in the Old World some two hundred years earlier, also used account book pages for some of their drawings. It is interesting that their use of such material should have been followed unwittingly by artists working in a quite different artistic tradition in the New World.

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